ONE THOUSAND ANSWERS

TO

ONE THOUSAND QUESTIONS.

A REPRINT OF THE SIXTH THOUSAND QUESTIONS IN THE INQUIRY COLUMNS OF "TIT-BITS," WITH THE REPLIES.



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1,000 ANSWERS TO 1,000 QUESTIONS.

1. Which bride has had the largest dower?

Miss Mackay—now the Princess of Colonna, and the daughter-in-law of Mr. Mackay, the "Silver King"—holds the record with a marriage portion of five millions sterling. When the Baroness Burdett-Coutts married Mr. W. L. Ashmead-Bartlett, M.P., she was possessed of £2,500,000. The wife of the present Emperor of China, who was married in February, 1889, had wedding gifts which were valued at upwards of a million and a quarter sterling. Amongst other presents she received on that occasion were 200 ounces of gold; 10,000 ounces (taels) of silver; one gold tea service; one silver tea service; two silver wash-basins; twenty horses with complete trappings; twenty horses without trappings, and twenty saddles for pack-horses and mules. The marriage portion of the Duchess of Edinburgh was £300,000 and a life annuity of £11,250 a year. The wedding presents of the Princess Louise of Wales on her marriage with the Earl of Fife were valued at £100,000. Some marriage portions in the United States consisted of the weight of the bride in silver coins, ascertained by placing her on one side of a pair of large scales and coins on the other until they weighed her down.

2. What is the size of the largest key ever made?

Three feet in length. The largest keys ever constructed were the wooden ones made in Egypt upwards of forty centuries ago. These locks and keys, the earliest known, were both made of wood. The locks consisted of bolt and staple fastened to the woodwork of the door, and when the bolt was pushed some way into the staple, three wooden pins fell into holes made in the bolt, and the door was locked. In ancient times the key was looked on as a symbol of authority. On public occasions the steward, with all solemnity, was accus-

tomed to march in front of those in authority, and a key was always hung over his shoulder as his recognised insignia of office.

3. Which lady has the greatest number of honorary decorations?

Her Majesty Queen Victoria, Empress of India. The more important of these decorations are: The Most Noble Order of the Garter, The Most Ancient and Most Noble Order of the Thistle, The Most Illustrious Order of St. Patrick, The Most Honourable Order of the Bath, The Most Exalted Order of the Star of India, The Most Distinguished Order of St. Michael and St. George, The Most Eminent Order of the Indian Empire, The Royal Order of Victoria and Albert, and The Imperial Order of the Crown of India. In addition to these she has received many honorary decorations from foreign potentates. The Queen is also colonel of one of the German regiments of Dragoon Guards, and, in addition to being head of the Church of England, is a prebend of one of the English cathedrals. The Queen of Denmark has also a great number of orders. Her Majesty is a Grand Commander of the Order of the Dannebrog, a very high order, which is rarely conferred even upon Sovereigns. In addition to this she holds the Russian Order of Catherine, the Spanish Marie Louise Order, the Portuguese Order of Isabella, the Hessian Order of the Golden Lion, the Russian Red Cross and the English Order of St. John, and many other decorations.

4. Where was the first gravestone erected?

The earliest known gravestone is that over the reputed place of Eve's burial, and known as Eve's Tomb, which is situated about a quarter of a mile from the western gate of Jeddah, and is an object of interest to Christian and Mussulman alike. The Arabic name of Eve is "Sittaea Hawwa," *i.e.*, the mother of mankind. The grave is 370ft. in length, the outline is marked by two parallel walls about 3ft. 6in. in height, and 8ft. apart. Two date palms are planted at the foot of the grave, which lies toward Mecca. Over the centre of the grave a small, dome-shaped mosque has been erected, in which pilgrims offer up their prayers. In the centre of the mosque is a dark-coloured oblong stone, supposed to rest on the body of our common ancestress. It is said to have been erected more than 5,000 years ago, and is kissed by thousands of pilgrims every year. The stone is worn smooth, and is curtained off to partially hide it from the visitor's gaze.

5. Who invented the envelope?

The idea of an envelope originated with M. de Vallyer, early in the reign of Louis XIV. of France. In 1653, with the Royal approbation, he established a private penny post: placing boxes at the corners of streets for the reception of letters, wrapped up in envelopes, which were sold at offices established for the purpose. One of these, addressed by Pelisson to Mademoiselle de Scuderi by her pseudonym of "Sappho," is still extant. Envelopes were first used in this country in 1839 or 1840 generally, as previous to the penny post envelopes were charged double postage. Stamped adhesive envelopes were introduced on May 6th, 1840. The first machine for making them was invented by Edwin Hill, a brother of Sir Rowland Hill. Messrs. de la Rue patented a machine for folding envelopes on 17th March, 1845.

6. When did the shamrock become the national emblem of Ireland?

In A.D. 433, when St. Patrick, a distinguished missionary of the fifth century, commonly known as the Apostle of Ireland, according to the legend, selected the shamrock to prove to the Irish the doctrine of the Trinity. In the County Down, in the south of Dabriada, he converted a chief named Dichu, who bestowed upon him the first Christian church that St. Patrick possessed. It was called Sabhall (Saul), or the barn, and it is still a church called by the same name. St. Patrick then set out to Tara, in the County Meath, which was at that period the central point of meeting for all the tribes of Ireland. There he preached to the King of Tara, Laoghaire, and it was at that place in A.D. 433 that St. Patrick is said to have used the shamrock to illustrate the doctrine of the Trinity. M. Bicheno, in a learned paper in the Journal of the Royal Institution, tries to show that the original shamrock was the wood-sorrel.

7. Which living European has read the Bible through the greatest number of times?

George Müller, founder of the well-known Orphan Homes on Ashleydown, at Bristol, who was born at Halberstadt, Prussia, on the 27th of September, 1805, and is, therefore, in 1894, upwards of eighty-nine years of age. When in training for the ministry he led, for a few years, a dissipated life, ending in his having to undergo a term of imprisonment. The period—1826 to 1829—proved the turning-point of his life, and since that time he has been an

earnest philanthropist, and one of the most persevering students of the Bible. In his autobiography, as to reading the Bible, he says that "it is of immense importance, for the understanding of the Word of God, to read it in course, so that we may read every day a portion of the Old and a portion of the New Testament, beginning where we left off." Mr. Müller has carried out this plan during a long life, and has read the Bible through more than a hundred times. In 1835 Mr. Müller printed proposals for the establishment of an Orphan Home, which took shape in 1836 at Bristol. He does not solicit or advertise for money, but depends wholly on the generosity of Christian people. As the result of prayer alone, he announced that he had received £84,141 up to 1856, on behalf of the orphans, who then numbered 297. By 1875 upwards of 2,000 children were lodged, fed, and educated. In 1889 it was announced that the Orphan Homes and associated enterprises cost about £36,000 per year, which sum is raised by the voluntary subscriptions of the public. The names of the donors are never published, all gifts being merely acknowledged in the Annual Report under the initials of the senders. To read the Bible through, at the rate of one chapter per day, would take three years and three months. It contains 66 books, 1,189 chapters, 31,173 verses, 773,692 words, and 3,566,480 letters.

8. What is the earliest age at which a child has been able to read and write?

The learned boy of Lubeck—Christian Henry Heinecker—was born on the 6th of February, 1721, and died on the 27th of June, 1725. He was able to read by the time he was one year old, and could write before attaining his third year. During his short life he displayed the most amazing proofs of intellectual talent; he had not completed his first year of life when he knew and recited the principal facts in the five Books of Moses. In his fourteenth month he knew all the history of the Bible; in his thirtieth month the history of the nations of antiquity, geography, anatomy, the use of maps, and nearly 8,000 Latin words. Before the end of his third year he could recite the history of Denmark, and the genealogy of the crowned heads of Europe. In his fourth year he knew the doctrines of divinity, with their proofs from the Bible, ecclesiastical history, arithmetic, and the history of the European empires and kingdoms. He could point out on the map whatever place he was asked for, and recite all the ancient and modern historical anecdotes relating to it. He spoke German,

French, Latin, and Low Dutch. His attainments were marvellous, but the strain was too great, and he succumbed to illness after reaching the age of four years four months twenty days and twenty-one hours. One of the most wonderful instances of precocity on record was that of J. P. Baratier, the gifted German philologist. Baratier was born at Schwabach, in 1721, and when only four years of age he spoke the French, Latin, and German languages; at five he had added Greek, and at six years of age he could translate Greek into Latin. He afterwards studied Hebrew, and at nine years of age this extraordinary boy compiled a dictionary of the most difficult words in the Hebrew language. At the age of fourteen Baratier was admitted as a member of the Academy of Science, Berlin. A brilliant career was predicted for him, but he died in 1740, at the age of twenty.

9. Which fire brigade has the largest fire-engine?

The Central Fire Brigade of Chicago has recently been furnished with two of the largest and most powerful land steam fire-engines in the world. They are constructed, when necessary, to work six sets of hose throwing ten tons of water per minute. Paris has a very extensive fire establishment, the largest in the word 203 engines and 1,500 firemen. London has 151 engines of all descriptions, and employs 707 officers and men. The number of journeys made by the fire-engines and hose vans of the Metropolitan Fire Brigade in 1891 was 32,795, and the total distance run 65,800 miles; these figures not including hose carts or the escapes, which are run by hand. The London Brigade uses seventeen million gallons of water yearly, that is, four and a half gallons per inhabitant, or 8,500 gallons for each fire. The New York Brigade consumes thirty-two million gallons yearly, that is, 25 gallons per inhabitant, or 18,000 per fire. The most expensive fire brigade is that of Boston, U.S., which costs 6s. 7d. per head of population to maintain; that of London costs the inhabitants the least, 5d. per head. Hamburg finds constant employment for the greatest number of firemen in proportion to population —305 per 100,000 inhabitants.

10. What is the size of the biggest balloon ever made?

Mr. James Glaisher, F.R.S., states that the balloon constructed in 1864 by M. Eugene Godard was the largest ever made. Its capacity was nearly half a million cubic feet. The air in this fire balloon was heated by an 18ft. stove, weighing, with the chimney, 900lb. This furnace was fed with straw,

and the "car" consisted of a gallery surrounding it. Two ascents of this balloon were made from Cremorne Gardens, on July 20th and July 28th, 1864. The "Géant," Nadar's colossal balloon, contained 215,363 cubic feet of gas, and raised thirty-five persons at one time. This balloon was also remarkable as having attached to it a regular two-story house for a car. Its ascent on Sunday, the 18th of October, 1863, was witnessed by nearly half a million of persons. After passing over the eastern part of France, Belgium, and Holland, the "Géant" suffered a disastrous descent in Hanover on the day after it started on its perilous journey. In 1873 a balloon of 400,000ft. of cubic capacity was made to enable Mr. Wise to cross the Atlantic, but it unfortunately burst. The longest distance travelled in a balloon in the shortest time was 1,150 miles in twenty hours, by Messrs. Wise and La Mountain, the route taken being from St. Louis, in the direction of New York.

11. Which clock in this country has the longest pendulum?

St. Chad's Church clock at Shrewsbury, which was made last century, has a longer pendulum than any other clock in this country. Its pendulum is 22ft. long, and the ball is 4ft. 3in. in circumference and 200lb. in weight. "Big Ben," in the clock tower of Westminster Palace, London, has a pendulum 15ft. in length. The dial is 71ft. in circumference, and the minute hand 11ft. 6in. in length, is hollow, made of copper, and weighs 1¼cwt. The figures on the face of the clock are over 2ft. in length, and the minute dots exactly 1ft. 1in. apart from centre to centre. The clock reports its own time to Greenwich, and is so accurate that it does not vary more than four seconds in the course of a year. The longest pendulum ever made is that used at the Eiffel Tower, in Paris, 377ft. in length, fixed to the centre of the second platform, and reaching to within 6ft. of the ground. The ball attached to it turns the scale at 212lb.

12. Which celebrity had a mathematical problem inscribed on his tombstone?

On the tombstone of Archimedes, who died B.C. 212, was engraved a sphere inscribed in a cylinder, in memory of his discovery that the solid contents of a sphere were exactly two-thirds of that of the circumscribing cylinder. By this mark the tombstone was afterwards found, covered with weeds, by Cicero when he was residing in Sicily as questor. Van Ceulen was a Dutch mathematician, who devoted a great deal of study to "the squaring of the circle." He found that if the diameter

of a circle was 1 the circumference would be 3·14159265 nearly. This result, which Van Ceulen extended to thirty-six places of decimals, was effected by the continual bi-section of the arc of a circle. These numbers are cut on his tombstone in St. Peter's Churchyard at Leyden. In the burial-ground of the Middleton and Thornham Burial Board, adjoining St. Leonard's Parish Church, Middleton, near Manchester, there is a tombstone erected to the memory of Mr. J. H. Eastwood, which has engraved upon it the eleventh proposition, second book of Euclid, and also the following statement : "J. H. Eastwood was the first to complete the demonstration of this proposition. Previously A B was not proved to be greater than A F.—Professor Wallace, M.A."

13. Which English preacher has addressed the largest audience?

The late Reverend Charles Haddon Spurgeon, when he preached at the Crystal Palace on Sunday the 7th of October, 1857, in the presence of an audience which has been variously estimated at between twenty and thirty thousand people. It was the day appointed as a fast at the time of the Indian Mutiny, when the feelings of the people were greatly moved. To the exegetical faculty of modern theologians, Mr. Spurgeon united a freshness and elevation of thought altogether uncommon. Amongst all shades of religious opinion the place of the late Mr. Spurgeon was admitted to be amongst the greatest preachers of the present century.

14. In which English church is there a memorial to a cow?

At St. Mary's, Bristol, are preserved two immense horns of a cow. The cow, in a measure, was thus canonized. It is related that during a great dearth of water in the city, the cow kept many a child alive with its milk, and at its death its memory was thus preserved. At Durham Cathedral there is an image of a cow amongst the decorated stone carvings of the cathedral, placed there in remembrance of the facts relating to the resting-place for the remains of St. Cuthbert, which were interred within the cathedral. For nearly three centuries the body of St. Cuthbert slumbered in the Abbey of Landisfarne ; but in 995 the frequent incursions of the Danes warned the brotherhood that the time for flight, which the bishop had hinted at before his decease, had come. Accordingly they took up the cherished relics, and wandered hither and thither for several years before they found a resting-place for the precious

dust they carried. At length, as the story goes, it was revealed to Eadmer that Dunholme was the spot selected by the saint himself. The brethren could not for a long time find where Dunholme was; but while they were wandering in the woods above the Wear, they heard a woman asking for her lost cow, and a voice responding uttered the word "Dunholme." Thus, says the legend, they found the place they were seeking. Having reached a fine open sward in the forest, they rested with their strange burden, and here, in no long time after, was built the splendid fabric of Durham Cathedral.

15. Is there any inhabited island on which no woman is allowed to land?

No woman is permitted to land on the Island of Fernando do Noronha, one of a group in the South Atlantic Ocean belonging to Brazil. It is a station for men convicts from Brazil, and all women are strenuously prohibited from disembarking there. On what is almost an island, the Peninsula of Athos, on the Ægean Sea, in Turkey in Europe, there exists a monastic Republic of 6,000 monks, governed by four presidents, the senior of whom is called the "Man of Athos." No female is allowed to enter the Peninsula, even of the lower animals. The monks live on herbs, fruits, and fish, following the precepts of St. Basil. They dwell in twenty large monasteries, and in a number of minor hermitages. The community enjoys complete autonomy in consideration of a payment to the Sultan of £2,000 yearly. On a hitherto uninhabited little island, three miles west of Padstow, on the north-west coast of Cornwall, lives a gentleman and his brother (sons of the late General Smyth) in a specially built cabin 22ft. by 15ft., from which female society is entirely absent.

16. Have diamonds ever fallen from the sky?

Instances are frequent of meteoric bodies falling from the sky containing amongst their materials specimens of metallic ores and precious stones. In the autumn of 1886 three meteoric stones fell in South Russia, one of which, on analysis, was found to contain diamond dust in very minute grains. A genuine diamond was, in 1888, found by two chemists in a meteoric stone, which fell at Novo-Urei, Penza. Some details of a recent discovery of diamonds in a fragment of meteoric iron, which fell at Arizona, were given by Professor Foote, of Philadelphia, in a paper read by him before the geological section of the American Association at its annual meeting at Washington. Professor Foote sent a piece weighing 40lb. to

Professor G. A. Kœring for examination. It was so hard that a day and a half were occupied in making a section, several chisels being spoilt in the operation, and in trying to polish the surface an emery wheel was ruined. A closer inspection was then made of certain cavities, when small black diamonds were found that cut corundum easily. The meteoric bodies amongst which diamonds have been found have fallen in immense quantities. On November 27th, 1872, such a shower fell that competent observers counted singly eight or ten thousand in the course of two hours. The stones in which the presence of diamonds have been revealed are both small and large. In 1803, 2,000 small red-hot stones fell in Normandy, whilst one is still shown at Copenhagen which was found in Greenland, weighing 49,000lb.

17. Which is the "wisest" of trees?

Morus nigra, the common mulberry, has been so called because it prudently keeps its leaves folded in the bud until all danger of frost is past. And this, in the excessively changeable climate of ours, is a sign of the greatest possible wisdom in plant life. The mulberry is not a tree of large growth; it has crooked, irregular branches, which spread into a wide head, and the bark is of a lightish brown colour. The leaves are dark green, heart-shaped, rough, serrated at the edges, and supported on short stalks. The flowers are of a greenish white: the short catkins, male and female on the same plant, make their appearance about June. In England, the first mulberry trees are said to have been planted at Sion House in 1548, and some of the original trees are believed be be there still.

18. Where is the finest thermometer in the world?

At the John Hopkins University, Baltimore, U.S.A. This remarkable instrument is known as Professor Rowland's thermometer, and is valued at £2,000. It is absolutely perfect, and so fine are the gradations of the glass that they require to be greatly magnified in order that they may be read.

19. What is the amount of the biggest bet on record?

The late Mr. Davis, in the year 1856, laid Mr. Clark £100,000 to £1,000 against each of the three horses he had in the Derby of that year. A bet of £90,000 to £30,000 is recorded as having been booked between Lord Glasgow and Lord George Bentinck. On July 12th, 1809, Captain Barclay, a great sporting celebrity and the chief pedestrian of those days, finished at Newmarket Heath a walk of 1,000 miles in 1,000

successive hours, at the rate of a mile in each and every hour. There were bets on this feat supposed to amount to £100,000, Captain Barclay himself having one of £16,000. During last century a bet of £20,000 was made, and won, by a Mr. Whaley, a young Irishman. He said that he would perform the feat of walking from Dublin to Constantinople (the Irish Sea and English Channel excepted) and back in a year. Another extraordinary bet of 15,000 guineas was once made between a noted gambler and Lord Lorne. It was upon the chance which a punch-bowl thrown against the wall had of being broken into an odd or even number of pieces. Lord Lorne backed odd and won. His antagonist was utterly ruined by the transaction. Gambling is now practised to a greater extent in Australia than in any part of the world. It is estimated that twenty millions sterling change hands throughout those colonies annually. Some eight millions are lost and won each year in the United Kingdom by betting men on the turf alone.

20. Where is the largest iron statue?

By far the largest iron statue in existence is the gigantic female figure, standing on Bedloes Island, in the Harbour of New York, representing Liberty Enlightening the World. It is the work of Auguste Bartholdi, who was born at Colmar, in Alsace, and was presented by the French people to the United States. The figure stands upon a pedestal that is 154ft. 10in. high, and is itself 151ft. 1in. in height. It is actually constructed of copper on the surface, but this metal is only about one-fifth of an inch thick. It is constructed on an internal iron frame. In the upraised right hand is a torch lighted by electricity. The pedestal and statue cost over £200,000. The iron statue of William Penn at Philadelphia measures 36ft. from the sole of the foot to the crown of the hat. The head is 4ft. in diameter, and 7ft. long with the hat on. The nose is 17in. long, and the distance between the eyes is 16in. The eyes are 9in. long, and the mouth 12in. across. The crown of the old Quaker's hat measures 12ft. in circumference, 4ft. high, and the rim 8ft. in diameter. The calf of the leg is 9ft. round, and the upper leg measures 15ft. The foot is nearly 6ft. long. The tower upon which it is to be placed will be 547ft. high.

21. Who was the youngest British Consul?

Mr. H. H. Johnston, Consul-General for Portuguese East Africa, and Her Majesty's Commissioner for territories lying to the north of the Zambesi, under British influence. When

Mr. Johnston first went to negotiate African treaties with Portugal, he was looked at a little askance by the Portuguese Government, who had some difficulty in being able to realize that he was in truth the Ambassador of the British authorities, when to them he appeared to be a boy. He was, in fact, very little more, and he is at the time of writing, 1894, the youngest of all Her Majesty's Consuls. "When I heard of him," said Mr. Stanley, "I thought the first of Cook's tourists must have arrived." Instead of that it was an English youth, with little more than the physique, as it seemed, of a girl, and with the gentle manners of a boy from school. Stanley, however, had reason later on to applaud the boy's pluck, and to commend his wisdom. "I found," he said, "that in a serious controversy with a powerful savage chief, Mr. Johnston had won his way all along the line."

22. What bird builds a watch-tower to its nest?

Mr. Brooker some time ago described the nest of a bird which does so, and which he met with in the Kalahari Desert in Africa. The nest is constructed of cotton, and is a large, bellows-shaped structure. Its most remarkable feature is the watch-tower that the male bird erects under the eave of the entrance to the nest, which projects and protects the tower. The male never enters the interior, but sits in his tower, and in case of danger gives a signal, when the female immediately escapes. This bird, called the "toutobane," is smaller than the wren, but larger than the humming-bird. It is coloured grey, with yellow breast and red legs. The nest is about seven inches by five inches. The pinc-pinc of Africa so builds its nest as to leave near the entrance a rounded projection on which a bird can repose. The male bird uses this perch, on which he posts himself, in order to mount guard over the inmates of the nest.

23. Have bank-notes ever been made of an animal's skin?

In China, the first country in the world credited with using bank-notes, certain skins were so valuable that they were accepted as cash and passed from hand to hand in the same way as bank-notes are at the present day. The negotiability of these skins arose thus. The Emperor Ou-Ti, being in want of money, gave his treasurer to understand that such a state of affairs must not continue. At that time it was customary for princes and courtiers on entering the Royal presence to cover their faces with a piece of skin. Taking advantage of this custom, the treasurer ordered a decree to be issued forbidding the use of any other skins for this purpose except those of

certain white deer in the Royal parks. Immediately there was a demand for pieces of these skins, which, being a monopoly, were sold at a high price, and the Royal coffers refilled. The steady value of the skins thus secured made them readily pass and be acceptable as an equivalent of coin of the realm. In the Russian seal fisheries of Alaska, the workmen were formerly paid in a currency stamped on squares of walrus hide.

24. Does a married man in any country require his wife's consent before travelling out of it?

Yes; this is the case in Austria. No Austrian male subject who is married can procure a passport for a journey beyond the frontier in any direction without first having the express consent of his wife. In Austria, however, the railways hold out considerable inducements to married men to take their wives along with them when travelling; ladies, accompanied by their husbands, being charged only half fare.

25. How many unofficial ladies are there in the world entitled to have their letters sent post free?

In consideration of the great services which Presidents Grant and Garfield rendered the United States, it has been enacted that their widows be allowed to send their letters through the post free. They merely write their names on the backs of the envelopes, and this is sufficient to allow them to pass without any charge for postage.

26. Is there any bank in this country which is licensed to sell beer?

According to the charter of the Bank of England, that corporation is not allowed to trade in any "goods, wares, or merchandise whatever," but it is allowed to deal in bills of exchange, gold and silver bullion, and to sell any "goods, wares, or merchandise" (beer included) upon which it has advanced money, and which has not been redeemed within three months after the time agreed upon. Lloyd's Bank at Wolverhampton is, perhaps, the only bank in this country which is duly licensed for the sale of beer. This license has been in possession of the bank for many years, and is renewed at regular intervals. There are several families which combine banking and brewing. As brewers, Guinness and Co. are well known for their brewery in Dublin, and they have offices and stores in London; but Guinness, Mahon, and Co. are also one of the two private banking firms in Dublin.

Hoare and Co. are brewers at 21, Lower East Smithfield, London, and C. Hoare and Co. are also bankers at 37, Fleet Street, London. Barclay, Perkins, and Co. are brewers at Park Street, Borough, London, and Barclay, Bevan, Tritton, Ransom, Bouverie, and Co. are bankers at 54, Lombard Street.

27. Where is there a wall in this country built entirely of tombstones?

In the front of the Glasgow Cathedral there is a wall which may be said to be built entirely of tombstones. This wall forms the southern boundary wall of the small ancient burying-ground which surrounds the cathedral. It is formed entirely of tombstone erections. It runs from Infirmary Square down to the "Bridge of Sighs," over which funeral processions pass into the Necropolis. This ancient and unique wall presents a very singular appearance when seen from the outside of the burying-ground. Another of these tombstone walls may be seen in the churchyard of St. Luke's, Chelsea. It almost forms a circle round the church, and is one of the most unique walls in the country.

28. Who has the largest bedstead in the world?

The French actress, Sarah Bernhardt. It is 15ft. broad, and when the fascinating owner, being indisposed, receives her intimate friends, reposing on her couch, she looks like a red-plumaged bird floating on a sea of white satin. The Great Bed of Ware, which was formerly at the Saracen's Head Inn, at Ware, but is now at Rye House, in Hertfordshire, is one of the curiosities of England. It measures 12ft. square, and is capable of accommodating from twenty to twenty-four persons. It is of carved oak, has the date 1463 painted on the back, and is said to have been sold among the movables which belonged to Warwick, the King-maker, at Ware Park. The biggest bed mentioned in the Bible was that which belonged to Og, King of Bashan. It measured about 84 square feet in area. Ludwig of Bavaria had the most expensive and luxurious bed known in history. The bedstead was of gilded wood, with ornaments of solid gold. The canopy was of blue velvet, richly embroidered with gold, and the bedspread was of embroidered velvet, with a heavy fringe of silk and gold.

29. In which country are there no clocks?

In Liberia there is neither clock nor timepiece of any sort, the reckoning of time being guided entirely by the sun's movement and position. The sun in Liberia rises at 6 a.m.

and sets at 6 p.m. almost to the minute all the year round, and at noon it is vertically overhead. The islanders of the South Pacific have no clocks. They have a curious timekeeper of their own. Taking the kernels of the nuts of the candle-tree, they wash them and string them on the mid-rib of a palm leaf. This is propped up and the top kernel lighted. As all the kernels are of the same size and substance, they burn each a certain number of minutes, setting fire then to the one below. The natives tie bits of bark cloth along the string at regular intervals to make divisions of time. The natives of Sangir, in the Malay Archipelago, put two bottles neck to neck with sand in one of them, which runs into the other every half-hour, when the bottles are reversed. Near at hand there is fixed a line, on which are hung twelve rods, marked with notches from one to twelve, with a hooked rod placed between the last hour and the next one. A keeper attends to the bottles and rods and sounds the hours on a gong.

30. What makes the Indian climate so perilous to Europeans?

Most persons would naturally conclude it to be the great heat, and such, indeed, was the settled opinion till of late, as shown by the Army regulation that troops in the hot season must travel only by night. A revolution in Anglo-Indian ideas on this subject, however, has taken place. It is now recognised that chills are the thing to be mainly guarded against. Heat, temperate and prudent men can stand, but chills are perilous. On this principle Sir Frederick Roberts submitted to the Indian Government a proposal to reverse the rule of soldiers on the move, so that they might travel by day and halt at night. In crowded trains at night it is found that the men cannot sleep, while in rest camps by day they loaf about restlessly, or visit filthy bazaars and villages, where they are apt to eat unripe fruit, and take impure and unwholesome drinks. Besides, for reasons given, they are particularly apt to get chills while travelling in the trains at night.

31. How is the velocity of a ray of light measured?

Several methods of calculating the velocity with which light is transmitted are known. By one, the size of the minute circle through which the observation of light makes stars apparently revolve is carefully noted—that is, the wandering of the rays of light from their normal path when passing through curved lenses, or reflected from curved mirrors—and the relative proportion of the earth's velocity in her orbit

to that of light arriving from the stars is ascertained. The result is that light is found to move about a hundred thousand times as fast as the earth, which gives the velocity of a ray of light as about 190,000 miles per second. By another method, observation is made of the time in which light actually arrives at the eye from one of Jupiter's satellites at the commencement or close of an occultation—that is, its being temporarily hidden by another heavenly body passing over it – as compared with the calculated times of those satellites. It is found that 8 minutes 18 seconds are required for light to travel over half the earth's orbit, which gives, as in the former case, about 190,000 miles per second for its velocity. The velocity is also measured directly by two instrumental methods, devised respectively by Foucault and Fozeau, with the same results.

32. Are there any stones which have the power of locomotion?

In Australia, and also in Nevada, magnetic stones are found which are apparently endowed with the power of locomotion. The stones are described as being almost perfectly round, the majority of them as large as a walnut, and having the appearance of iron. When distributed upon the floor, table, or other level surface within 2ft. or 3ft. of each other, they immediately begin travelling towards a common centre, and there lie huddling up in a bunch like eggs in a nest. They are found in a region which is comparatively level, and is nothing but a bare rock. Scattered over this barren district are little basins from a few feet to a rod or two in diameter, and it is in the bottom of these that the moving stones are found. They are from the size of a pea to 6in. or 7in. in diameter. The cause of these stones rolling together is to be found in the substance of which they are composed, which appears to be loadstone or magnetic ore. A single stone, if removed to a distance of not more than 3½ft., upon being released, immediately starts off with wonderful celerity to join its fellows; but if removed 4ft. or 5ft. it remains motionless. In the Falkland Isles there are rivers of stones which slowly but surely move onwards. They consist of blocks of quartzite, mostly small, which fall into the valleys on being detached from the rocky ridges above, and become embedded in the spongy soil. They are subjected to a constant expansion and contraction as the soil is either saturated or becomes comparatively dry. Whenever the expansion takes place the stones slip down some distance, however small or infinitesimal, and, therefore, are more or less

constantly on the move. These moving "moraines," or stone rivers, are one of the wonders of that part of the world. There are in many places stones or masses of rock so finely balanced that a slight touch makes them move and commence rocking.

23. Has a pantomime ever been performed in the Arctic regions?

In 1852-53, when the *Resolute* wintered at Melville Island, the men occupied themselves with various theatrical amusements, among which a pantomime was one. Of course, there were no ladies to take the female parts, and Sir George Nares, who took a leading hand in promoting these diversions, describes how he appeared in the character of Columbine, and with the bare shoulders and arms, and altogether light attire which the part required, he says he was not sorry when it was over. When he spent another winter in the Polar regions, in command of Her Majesty's ship the *Alert*, in 1875-76, he resorted to similar methods of keeping up the spirits of his crew. The Royal Arctic Theatre was opened November 18th, after it had been closed nearly twenty-three years. A stage was erected on the main deck, and a pantomime was taken part in by many of the explorers.

34. Can any trees be used as lightning conductors?

M. Oovaroff, a Russian scientist, some time ago discovered that the white poplar (*Populus albus*) can be used as a natural lightning-rod. Various experiments have proved its value in this respect, and the authorities in Russia are thinking about issuing an edict making it compulsory for every inhabitant in the villages to plant a poplar tree in front of his dwelling. It occasionally attains a height of ninety feet, and the trunk in some cases acquires a diameter of three feet. Generally its height is between fifty and seventy feet. Some trees are much more attractive to lightning than others. Assuming the risk to the beech, which is very rarely struck, at 1, that to the fir or spruce would be 15; to trees like the ash, sycamore, and elm it would be 40; and to the oak 54. Single trees are much oftener struck than groups, and trees near water or damp ground than those in dry soils.

35. Where is the largest wooden statue in the world?

In Tokio, the capital of Japan, there exists a gigantic statue of a woman, made of wood and plaster, and dedicated to Hachiman, the god of war. In height it measures 54ft.;

the head alone, which is reached by a winding stairway in the interior of the figure, being large enough to comfortably hold twenty persons. The figure holds a huge wooden sword in one hand (the blade of the weapon being 27ft. long) and a ball 12ft. in diameter in the other. Internally the figure is fitted up with an extraordinary anatomical arrangement, supposed to represent the different portions of the brain. A fine view of the country is obtained by looking through one of the eyes of the statue. The largest stone statue in the world is situated at Banian, on the road between Balk and Cabul. It is 173ft. high.

36. Where is there a line of rails known as the "Innocent Railway"?

This title was bestowed by the inhabitants of the district upon a horse and tram line of rails in the Portobello and St. Leonards district, not far from Edinburgh. The title is believed to have been given on account of the line being innocent of speed and innocent of engine-power, the only power used being horse-traction.

37. Have flying bullets ever been photographed?

This has been done in London by Professor Boys, and abroad by Herr Ottomar Anschutz, Herr H. Mach, Dr. Riegler, and others. The problem which Professor Boys set himself to accomplish was that of securing a photographic picture of a rifle ball or bullet passing through the air at the scarcely conceivable speed of two thousand feet a second. The source of illumination was the electric spark such as that given by the dischaige of a Leyden jar. The camera and lens were for this occasion dispensed with, and the gelatine plate impressed direct with the shadow of the missile as it traversed the intervening space between the plate and the light source. The next thing considered was the best means of causing the bullet to turn on the electricity for its own portraiture, the motion of a flying bullet being of too rapid a nature to admit of any other procedure. At first two copper wires were placed in the path of the projectile, the notion being that the bullet itself would make the necessary metallic bridge between them. But the wires were shot away. Lead wires were then substituted with success. A curious result of this instantaneous photograph of the flying bullet is that the process has actually produced a picture of the disturbance of the air caused by the passage of the bullet. Any solid body passing through the air must of course push the air before it, causing a

momentary vacuum behind it; but hitherto no one ever imagined that such phenomena as these could be depicted or even seen. These pictures of flying bullets have, however, shown most clearly the exact position of the curves brought about by the disrupted air, both before and behind the rapidly moving projectile. Experiments with instantaneous photography have elicited a curious fact as to bullets fired from cylinder guns. These, though discharged at one time, reach the target at different times. Observations made on firing at a target 40yds. distant showed some bullets lagging behind about 10yds. With the choke-bore gun some bullets were seen to be 8yds. behind the others.

38. Which railway station in the world has cost the most money to erect?

The Bombay terminal station of the Great Indian Peninsula Railway, opened in May, 1876, the erection of which is said to have cost three million rupees (£300,000). It is the finest structure of its kind in the world, and occupied ten years in building. The North British Company have been engaged in remodelling their Waverley Station in Edinburgh, and in the negotiations with the municipal authorities of that city, before the works were commenced, it was stated that they would entail the expenditure of a million sterling. Another costly railway station, said to be the largest and finest in Europe, is the new central railway station at Frankfort-on-the-Main, in Saxony, which has been several years in course of erection. In some railway stations the substructure, or buildings below the level of the street, has cost a very large sum, in addition to the superstructure, which includes the forecourt, booking-offices, fittings, towers, roof, gas and water mains, and so forth. The substructure of Cannon Street Station cost £74,962; the superstructure, £157,262; amounting to a total of £232,224. At Charing Cross the substructure cost £41,422; the superstructure, £111,604; making a total of £153,026. New Street, Birmingham, one of the largest stations in the world, cost a quarter of a million pounds.

39. What is the size of the largest pair of shoes ever made?

A New York shoemaker recently made for Miss Fanny Mills, of Ohio, a pair of shoes, size 30. Measurement 22in., instep 22in., heel 25in., ankle 20in. The shoes made for Miss Ella Ewing, Fairmount, U.S., measured 18½in. in length. The young lady, who is but eighteen years of age, cannot purchase

ready-made shoes, but is compelled to have them made specially for her. There is enough leather in one of the heels to build five pairs of ordinary ladies' shoes, and the leather in each shoe would be sufficient, if it could all be utilized, to make thirty pairs of ordinary shoes. Miss Ewing is nearly 8ft. in height, and weighs 245lb. Mr. Cooper, a saloon-keeper in Buffalo, New York, has a foot 17in. in length, and in this country there is a man resident in Yorkshire reported to be wearing shoes 16in. in length. A Georgia shoemaker has recently accomplished a big feat in shoemaking. For a pair of shoes it took a piece of leather containing 1,040 square inches to make the uppers, and one of 1,960 square inches to make the soles, or exactly 3,000 square inches of leather altogether. If the leather contained in that pair of shoes were cut into strips an eighth of an inch wide, it would make a string 24,000in. long. The soles of this gigantic pair of shoes are 14in. long and 5½in. wide. The two combined tipped the scales at exactly 8½lb. In our own country, in the reign of Queen Mary, square-toed shoes were the fashion. Men took to wearing them so broad, that a proclamation was issued restricting their breadth to 6in. square at the toes.

40. Do hat-pegs exist round the walls of any churches?

Hat-pegs appear to exist round the walls of many churches. Some have doubtless been removed in the work of restoration. At Yaverland Church, near Bembridge, Isle of Wight, at any rate on one side of the church, there was a row of hat-pegs. At Cleveland Church, Somerset, on the north wall of the nave, which has only a south aisle, there is a row of pegs extending the whole length of the wall. The parish church of Hazeleigh, near Maldon, Essex, retains hat-pegs round the nave and an hour-glass stand near the pulpit. Hat-pegs are also said to exist in the churches of West Stafford, near Dorchester; Fordington St. George Church, Dorchester; Halston the Lower, Kent; and at Hickling, Nottinghamshire; whilst at Westham Church, just outside Pevensey Castle, tall crosses were set up at the junction of the high square pews, each affording accommodation for five hats at least on either face. Shap Church, Westmorland, and Onibury Church, near Ludlow, have still hat-pegs in use. The former is distinguished by having not only hat-pegs on the walls, but a coronal of hat-pegs round each of the pillars of the nave. In some churches hat-pegs appear to have extended even to the pulpit.

41. What causes a spinning-top to stand erect?

A spinning-top is maintained in an upright position by a combination of two forces—(1) the force of the earth's gravitation, or pull downwards; (2) the force of centrifugality, which pulls horizontally the top in all directions at once. And it is the combination of these two forces which maintains the top in a vertical position. The same thing is more obvious in the case of a school-boy's trundled hoop, which the moment the speed is relaxed begins to wobble, but on receiving a forward blow regains the upright position. The upright position is maintained only so long as the speed is sufficiently great to overcome the pull of gravitation, and when the top begins to spin round slower and slower, the vertical position is lost, the top begins to sway from side to side, and finally falls to the ground. The speed of a top which went for forty minutes has been found to be at the same rate as an express train, or a mile a minute. The motions of the earth and of all the heavenly bodies are controlled by precisely the same guidance as that which keeps a spinning-top upright.

42. On whom was the title of baronetess conferred?

The "Gentleman's Magazine" for 1754 gives the following instance of one created by James II.: "Sept. 9, 1686, Cornelius Speelman, of the United Provinces, a General of the States of Holland, created a baronet, with a special grant to the General's mother of the rank and title of a baronetess of England." A similar honour was conferred, in the reign of Charles I., upon Dame Maria Bolles, of Osberton, in the County of Nottingham; and these two are the only instances on record in which baronetcies have been conferred upon women. The first baronetcy created was that conferred on Sir Nicholas Bacon, of Redgrave, Suffolk, knight, whose patent is dated May 22nd, 1611.

43. What is the average speed at which thunderstorms travel?

On the authority of the superintendent of the London Meteorological Office, the average speed of thunderstorms is about twenty miles an hour. In 1888 Herr Schönrock studied 97 thunderstorms in Russia, with reference to their speed of travel. He obtained as mean velocity about 28·5 miles an hour, with variation from 13 to 60 miles. As a rule, thunderstorms occur more frequently at sunset than at any other period of the day, and are more numerous in high latitudes than in low. The dampness of the English climate causes them

to be more destructive than elsewhere. They never occur in the Arctic regions, and previous to June, 1890, they had never been experienced in the Mauritius since 1801. Madagascar suffers very much from their frequency and severity; the annual loss of life from them amounts to 300. Java has the greatest number of any country in the world; they take place with intensity at least once on ninety-seven days throughout the year. In Great Britain they take place about seven days annually. In Jamaica they occur with the greatest regularity between the hours of 12 noon and 3 p.m. during the rainy season, which lasts for five months, or about 150 days. The same thing occurs at Natal, but during the summer months—October to February. In Brazil they occur with such regularity that invites to parties, etc., are given intimating they are to take place either before or after the diurnal thunderstorm.

44. Which newspaper was first printed by steam?

The 'Times' was the first newspaper to be printed by steam. Until the year 1814 all the printing in the world was done by hand, and the 'Times' could only be struck off at the rate of 450 copies per hour. A compositor, however, in the office of the 'Times,' named Thomas Martyn, as early as 1804, conceived the idea of applying Watts's improved steam engine to a printing press. He showed his model to John Walter, who furnished him with money and room in which to continue his experiments and perfect his machine, but the pressmen pursued the inventor with such hate, that the scheme had to be given up. Ten years later, another inventor, named König, procured a patent for a steam press, and Mr. Walter determined to give the invention a trial. The press was secretly set up in another building, and a few men, pledged to secrecy, employed to work it. On the night of the trial the pressmen in the 'Times' building were told that the paper would not go to press until very late, as important news was expected from the Continent. At six o'clock in the morning John Walter went into the press-room, and announced to the men that the whole edition of the 'Times' had been printed by steam during the night, and that thenceforward the steam press would be regularly used.

45. In what trades does a "dozen" vary from two to eighty?

As the derivation from the French *douzaine* implies, it is generally presumed that a dozen means 12 things, but in the Staffordshire potteries, and in the earthenware trade, queen's-ware in Philadelphia, crockery in other places, a dozen

to this day represents that number of any special article which can be offered at any fixed price. That is, the price is fixed, and the number of the dozen varies. For instance, the pitchers which are called jugs in the trade are sold as 2, 3, 4, 6, 9, 12, 18, 24, 30, 36 pieces to each dozen, the price for a dozen being constant. The ordinary pitcher holding a quart is a twelve, or 12 to the dozen, while a pint pitcher is 24 to the dozen, and is so called when dealing with that size. Few of the articles of the trade are sold in dozens of 12, plates being almost the only ones, and some of them being sold 60, 70, and even 80 to the dozen. Besides these curiosities in figures, the potters have peculiar names, such as cockspurs, twiflers, etc., that make up a trade language of itself. The baker's dozen of 13 is a recognised figure in their trade; a publisher's dozen is usually 13 copies. Among fishermen in Cornwall a long dozen consists of 26.

46. In what part of the world does an intoxicating grass grow?

Besides the "Dronk" grass—that is, Drunk grass—of the Dutch colonists in South Africa, there is in Mongolia another plant with a corresponding native name and similar properties. It is a new species of *Stipa*, which was brought from the Alachan mountains by a Roman Catholic missionary, whose horses were disabled by its inebriating qualities. In Kamtchatka an intoxicating plant is found of considerable strength. The most common method of using it is to roll it up like a bolus, and swallow it whole. In South Dakota and Texas there is a singular variety of grass with strong narcotic properties, which is known as the "sleepy grass."

47. Has a blind man ever superintended the construction of roads?

Such was the employment successfully carried on for many years by John Metcalf (Blind Jack), of Knaresborough, born in 1717, who was blind from six years of age. His first work of this kind was the making of a road, three miles in length, between Fearnsby and Minskip. He completed the road within the stipulated time, to the entire satisfaction of the surveyor and the trustees. Many of the principal roads in Yorkshire, Lancashire, Cheshire, and Derbyshire were constructed by him, sometimes upon plans designed by others, but more often they were surveyed and laid out on his own plans entirely. In one of his undertakings—namely, the construction of the road from Huddersfield

to Manchester—he anticipated the work which made the name of Stephenson, when making the railway across Chat Moss, famous all over the world. The idea of constructing a road over a swamp by laying down bundles of heather and ling transversely one on the top of the other, and then putting on stone, was that of Metcalf, the blind road-maker; and Stephenson, in his great work on Chat Moss, did not hesitate to adopt his plan without even making an effort to improve upon it. At the age of seventy-five Metcalf was still busy road-making, and not until he had attained the great age of ninety-three did he leave off active work.

48. Can meat be cooked by cold?

The generally accepted theory of the cooking of meat relates to the application of heat; but Dr. Sawiczevosky has called attention to the fact that almost precisely the same chemical and physical changes can be accomplished by the exposure of animal flesh to extreme cold. Indeed, the sensation experienced by touching freezing mercury is very much that of a severe burn. The experimenter referred to applied his method to the preservation of meats, first by subjecting them to a temperature of 33° below zero, Fahrenheit, and then sealing them up hermetically in tin vessels. Animals and substances which had been so treated and for some time kept in these boxes, on examination proved to be extremely palatable, and, being partially cooked, required very little heat to prepare them for the table. An establishment in Hungary is now engaged in the preparation of meats by this method on an extensive scale.

49. To what amount yearly are dividends on Government stocks unclaimed?

According to a Parliamentary return recently issued, the dividends due on the 3rd of April, 1891, and not demanded, amounted to £400,713 19s. 5d.; and on the 3rd of July, £368,823 9s. 2d.; on the 2nd of October, £374,816 15s. 9d.; and on the 2nd of January, 1892, £354,664 11s. 8d.; of which the larger portion was advanced to the Government, pursuant to Act of Parliament. The number of Government stockholders is about 250,000, and large sums annually remain unclaimed by reason of death, absence abroad, etc. After ten years' non-claim these unclaimed stocks and dividends are advanced to the National Debt Commissioners till claimants appear. When a claimant appears, but not till then, the Bank of England advertises in the leading newspapers for further claimants, giving (1) the amount and

description of the stock, (2) the date of the transfer to the National Debt Commissioners, (3) the names, addresses, and descriptions of the original stockholders, and (4) the name and address of the claimant. When Mr. Goschen converted the Debt in 1889, no fewer than 12,700 notices were returned by the Post Office as not known. After every inquiry £7,850,000 was unclaimed, and credited to 10,900 accounts in the Bank of England; the presumption being that most owners were dead or gone away.

50. Are outfits provided for this country's diplomatic representatives?

The amount so spent is considerable. According to the estimates for the year 1892 1893 the following sums as diplomatic outfits were entered to be voted, namely: £2,000 to Lord Dufferin on going to Paris; £1,200 to Sir Clare Ford on going to Constantinople; £2,000 to Sir Henry Wolff on going to Madrid; £2,500 to Lord Vivian on going to Rome; £1,150 to Sir Edmund Monson on going to Brussels; and £1,100 to Mr. Egerton on going to Athens. Mr. Lowther (Under-Secretary), in his place in Parliament, stated that "the outfit was meant to cover, not only the personal expenses of a Minister, but also the travelling expenses of his family, the expenses of moving his own private furniture, carriages, and horses." The English Ambassador in France receives as salary £9,000 a year; in Austria and Turkey, £8,000 each; in Russia, £7,000; in Germany, £7,500; in Italy, £7,000; in the United States, £6,000.

51. What volume of sound would be necessary to be heard round the world?

Could it be possible to arrange the propagation of sound in such a manner that, instead of ascending and being lost above the limit of the atmosphere, it would travel around the surface of the globe, the volume of sound required to travel and be heard at all points of the equator, a distance of nearly 25,000 miles, would necessitate the preparation of a cannon sufficiently large to fire a charge two hundred times larger than ever has been made, and thunder peals would require to be 555 times louder than the strongest ever yet known. The globe would be, of course, shaken to pieces. To take another example, a strong man's voice sent through a speaking trumpet twenty feet long has been heard at a distance of three miles. To reach six miles a sound four times as powerful would be required; to reach twelve miles' one

sixteen times greater would be needed. And thus to be heard round the world the sound must be as powerful as would be produced by nineteen million nine hundred and one thousand one hundred and thirty-two strong voices speaking through such trumpets. The furthest distance which sound has, up to this time, been known to travel was 1,600 miles, on the occasion of a volcanic explosion in 1815, at the Tomboro Mountain, in the island of Sumbawa.

52. What is the size of the largest ball ever fired from a cannon?

The largest projectile ever fired from a cannon was 2,600lb., from the largest gun yet manufactured. This gun was made at the works of Krupp, at Essen, for the Russian Government, and has been placed in the fortifications of Cronstadt. Its calibre is 16¼in., length of barrel 44ft., is made of the finest cast steel, and weighs 135 tons, or about 270,000lb. It has a range of twelve miles, and can be discharged twice in a minute. The cost of each shot has been estimated at £300. The heaviest English gun weighs 111 tons, and its shot 1,800lb. The shot discharged by the second Woolwich Infant weighed 1,650lb., the gun itself 80 tons, and for each discharge 300lb. of gunpowder was required. The Italians fire shot of 2,000lb., and the French of 1,984lb. There are some ancient guns of very large dimensions in existence, but they do not carry heavy charges. Numbers were made in India, the largest being known by the name of "Malick è Meidan," or Lord of the Plain, which was 14ft. long, had a 28in. bore, and fired a ball 1,600lb. in weight. "Mons Meg" at Edinburgh Castle is 13ft. long, with a calibre of 20in.

53. What is the fastest speed attained by passenger elevators or lifts?

The maximum speed of the fastest passenger elevators which have ever been built is 1,500ft. a minute, or a rate of one mile in three minutes and a fraction. Before the fire in the Western Union building occurred, says a New York paper, that company had a machine capable of running 1,500ft. a minute. These machines are of the water balance type, the invention of Cyrus Baldwin. With the modern elevator almost any speed desired can be obtained; it all depends upon the power used and the distance travelled. In a building which has a shaft of 250ft. a speed of from 850ft. to 1,000ft. a minute can be attained. On a rise of 150ft. it is easy to get a speed rate of 750ft. per minute with a weight of 1,000lb.

aboard the elevator. In Chicago the fastest elevators are in the Union Trust Company building, on Broadway, near Wall Street. They shoot up or down, carrying 3,000lb., at a speed of 600ft. a minute. When tested with lighter weights they have travelled from 800ft. to 900ft. a minute. The average speed of elevators in office buildings in and around New York is 300ft. a minute. It is best adapted for work, and experience has demonstrated that more passengers can be carried daily in a car going at that speed in the ordinary large building than any other.

54. Who possesses the largest camellia ever grown in this country?

Mr. G. F. Lyndon, at his nursery gardens at Birmingham. This huge camellia occupies an entire greenhouse all by itself, and entirely fills it. In February, 1892, although 2,000 buds had been cut from this extraordinary plant, it had still 6,000 buds to open. The largest camellia in Europe grows at Pilnitz, near Dresden, and forms one of the sights of that district. It was imported from Japan about 150 years ago, is about 17yds. high, and has an annual average of 40,000 blossoms.

55. What is the heaviest ship's rudder ever made?

The heaviest rudder on record up to the present date is that made for the torpedo ship *Vulcan*. It was forged in a single piece and weighs twenty-two tons. Large castings and forgings have been made for several of the large battle-ships recently completed or under construction. The sterns of the *Victoria* and *Blake* were forged in one piece, and weigh upwards of forty-five tons. The French ironclad *Brennus* (launched on the 17th of October, 1891, at L'Orient) has a rudder which is 18ft. in height, 13ft. in width, and weighs seventeen tons.

56. Have any newspapers in a British possession ever been excommunicated?

In August, 1890, the Roman Catholic Bishop of Malta (Mgr. Pace) excommunicated three Maltese newspapers—the 'Malta,' 'Kabernalti,' and 'Movimento'—for revolt against his authority and that of the Holy See. These journals found themselves unable to continue their publications because, as soon as the decree of excommunication was promulgated, the type-setters refused to take part in the composition of the journals. Then, it is said, the editors of the two first-named journals, seeing the errors they had committed, made a retraction to the Bishop,

who consented to the publication of the newspapers on their names being changed to the 'Maltese Gazette' and 'Kubar-catolica.' The third journal suspended its publication pending an appeal to the Holy Chair. The alleged offence consisted of intemperate and unchristianlike attacks upon the Pope and the Bishop of Malta, in connection with Sir John Lintorn Simmons's mission to Rome.

57. Who in this country has the largest number of pet dogs?

A lady residing at Malvern keeps no fewer than seventy-eight pet dogs of various breeds, which are located in pens in a large field, and fed with the best of meat. Each day the lady selects a fresh dog to accompany her in her walks, so that all her pets get an airing in turn. Her Majesty has forty canine pets, her greatest favourites being collies. The Queen's pet dogs include Pomeranians, fox-terriers, and dachshunds. Florence May, wife of the present and seventh Duke of Newcastle, has a special fondness for dogs, and especially for those breeds which are little known in England. The kennels are at Clumber Park, Notts, the Duke's ancestral residence. In October, 1891, six splendid specimens of the Russian wolfhound were added to this collection, some of the finest of their kind having been purchased in Russia for her Grace especially, worth about £200 each. At Eltham, Kent, Colonel North has a very fine collection of dogs, having paid £850 for his best. The number of dogs licensed in Great Britain is 1,128,000, in Ireland 368,000, in France 2,864,000, in Germany 1,432,000, and in Sweden 513,000. Great Britain has 38 dogs to every 1,000 inhabitants, Ireland has 73, France 75, Germany 31, and Sweden 11.

58. Has an elopement ever taken place on bicycles?

Such an elopement took place some years ago in one of the Eastern States of America. In the village of Brookline resided an old lawyer with his wife and daughter, the latter eighteen years of age, who had been assiduously courted for a couple of years by a young physician of the neighbourhood. The young lady's parents refusing consent to the marriage, an elopement was resolved upon, and the matter was readily arranged. The lady had been presented by her father with a bicycle to gratify her often-expressed wish, and became an expert in riding it, attaining a speed which far surpassed the best endeavours of the family team of horses. The doctor likewise purchased a bicycle, and soon

became an equally proficient rider. Upon the day appointed for the elopement the lady departed as usual, early in the morning, for her regular exercise on the bicycle, while at the same time the gentleman started from his residence for a similar purpose, though in a different direction. The roads, however, ultimately joined, and within an hour's time the two bicycles, with their enthusiastic owners, were observed together by a resident of Brookline, who passed them on horseback, and communicated the fact of his observation to the parents. A consultation was held, which resulted in the family coach being called into requisition and a chase of the fugitives undertaken. After the truant pair were sighted the chase became exciting, but, after an hour or two, had to be abandoned, the runaways on wheels having got too far ahead, and the velocipeding lovers reached an appointed station, where they took train, which conveyed them even more rapidly than their bicycles to their would-be haven, where they were married and made happy. The parents, finding their child wedded beyond all dispute, gave a reluctant consent, and the doctor and his bride returned to Brookline in triumph.

59. Where is the largest telephone switchboard?

The two largest telephone switchboards in the world are, one in the Berlin Telephone Exchange, to which 7,000 wires are connected, and one made for the Central Exchange of the Metropolitan Telephone Company of New York, at a cost of £64,000. Over two hundred patents were availed of in constructing this huge collection of telephonic wires. Six thousand wires were accommodated on the board when it was first erected, and it is capable of accommodating 10,000. The length of the switchboard is 300ft. Over 1,000,000 joints had to be made good, and 3,000 miles of wire were required. Electrical experts have pronounced this switchboard perfection. There are 774 telephone exchanges in the United States, with 240,412 miles of wire and 202,931 subscribers.

60. Which is the longest sentence in English literature?

One found in the Act of Parliament 59 George III., Chapter 69, intituled, "An Act to prevent the Enlisting or Engagement of His Majesty's subjects to serve in Foreign Service, and the fitting out or equipping in His Majesty's Dominions vessels for warlike purposes, without His Majesty's license." The second section of this Act contains but one sentence, with 807 words in it, and without a single stop

between its first word "And" and its last word "convicted." The seventh section of the present Foreign Enlistment Act forms one sentence of 600 words. The Right Honourable W. E. Gladstone forms longer sentences than any other English writer or speaker, present or past. One of his longest sentences was contained in a speech, in August, 1890, at the National Liberal Club. It occupied twenty-four lines of news type, and contained 214 words. Sir F. Abel, in his presidential address to the British Association, gave utterance to a sentence containing 204 words.

61. To what extent is heat generated in the human body during the course of a day?

Dr. Milne Murray, in a lecture on "Animal Heat," showed how animal heat was produced in the human subject—how food acted as fuel; how its combustion, so to speak, was supported by the oxygen which was inhaled through the lungs; and how throughout the body heat was maintained by the process, in virtue of which the various tissues of the body made good the wear and tear of action by appropriating the nutrition which the blood conveyed to them. The muscles were the great heat-producing tissues in the body, just as they were the great work-producers. It has been estimated that about four-fifths of the entire heat in the body is produced in the muscles. The amount of heat produced by a man of average weight during a day of average work would be sufficient to raise about 63lb. of water from the freezing to the boiling point.

62. What is the amount of the largest fine inflicted on a smuggler?

At the Hull Police-court, the case of Emil Poulsen, upon whose farm at Cottingham fifty-two bales of smuggled tobacco, weighing in the aggregate 3,000lb., were found, was removed to the Court of Exchequer on a writ of *capias*. Robert and Frederick Poulsen, sons of the above-named, were found guilty of having in their possession 154lb. of tobacco, and were each fined the treble value and duty, £123 4s. An old man named Maw and a boy named Arthur Poulsen, a relative, were each fined £2,545 16s., treble value and duty. William J. Adams, ship's steward, was charged with being concerned in the importation of 2,100lb. of tobacco, and was fined the treble value and duty, £1,870 13s. The magistrate inflicted the alternative of six months' imprisonment (the full term allowed) in each case. The fines amounted in the aggregate to over £7,000. From 1882 to 1891, 32,225 seizures of smuggled goods

were made in the United Kingdom; 24,765 persons convicted, and penalties to the amount of £53,323 recovered. Smuggling must either be on the increase, or Custom House officers are becoming more active, as the largest number of seizures took place in 1891—5,842, when 16,756lb. of tobacco and cigars and 239 gallons of spirits were confiscated, 4,704 persons convicted, and 4,652 penalties recovered, amounting to £8,126.

63. In which part of the world do they get four crops of grass in a year?

At Myremill Farm, near Maybole, in Ayrshire, on which liquid manure is used. Mr. Kennedy, the owner and occupier, cut, within seven months, 70 tons per acre; and if the whole is cut, four or five heavy crops are carried during that period. The Italian rye-grass, which he cultivates, is found to grow 2in. in twenty-four hours. At Mr. Telfer's farm, near the town of Ayr, the same field, in one year, has produced a first crop of about 18in. deep at the latter end of March; afterwards a second, from 18in. to 2ft. deep; a third, from 3ft. to 4ft. 6in. thick; a fourth, that was nearly the same; a fifth, 2ft. in depth; and a sixth, 18in. in depth or thickness; the grass cut on this farm in seven months being thus in the aggregate not less than 14ft. 3in. in height. The land about Edinburgh, Newhaven, Leith, and Portobello produces an average crop of thirty to forty tons per acre in four cuttings, the first taking place at the beginning of April and the last at the end of September, after which cattle are turned on to it. Abroad, the liquid sewage of Milan, in Italy, meets in a canal named the "Vettablia," which ramifies 4,000 acres of land before entering the River Lambro. This land is let at £21 for two and a half acres, and the grass is mown in November, January, March, and April for stable-feeding; in June, July, and August it yields three crops of hay for the winter, after which it provides abundant pasture for the cattle.

64. Are nettles of any commercial value?

In this country the chief if not the only use nettles are put to is for food, either served as vegetables or used in the preparation of tea or beer. In Belgium, Germany, and other parts of Continental Europe, the use of nettles for such purposes is much more common than with us. In other countries the various species of the nettle yield valuable fibres, which are used for textile fabrics. In Dresden, a thread is produced from the nettle so fine that a length of sixty miles weighs only

2½lb. With reference to one genus of the nettle tribe, Boehmeria, which grows in tropical and sub-tropical climates, the fibres of several species are highly esteemed. Amongst these may be mentioned the B. nivea of China, from which is made the China grass cloth, a fabric rivalling the best French cambric. The inner bark gives the best fibre, while the outer bark, being coarser, is used for cordage. B. Puya, of Nepaul and Sikkim, yields Puya fibre, and B. albida is used for textile purposes in the Sandwich Islands. As to another genus of the nettle tribe, Urtica, the fibre of the U. cannabina is much used, while from that of the U. whitlavi both fine lace and strong ropes are manufactured.

65. Where is the most costly staircase in this country?

The main staircase in Mrs. James Mackay's house in Carlton House Terrace, London, which cost no less than £20,000. There is a unique and costly staircase in the palatial house of Baron Hirsch, in Paris, at the corner of Rue de l'Elysées and the Avenue Gabriel. The house formerly belonged to the Empress Eugénie, and the staircase, which is a grand work of art, is not only costly in itself, but is hung with marvellous and costly tapestries. The main staircase in Dorchester House, the property of the late Mr. R. S. Holford, is a magnificent one, and probably second only to that in Carlton House Terrace in point of cost. Dorchester House is celebrated for the artistic and costly nature of all its internal fittings and appointments, the sculpture of some of the chimney-pieces being amongst the grandest specimens of modern work. It is also noted for its excellent collections of pictures and books.

66. Have two women ever entered into matrimonial relations with each other?

An extraordinary case of this kind occurred about six years ago in Austria-Hungary. A young man, calling himself Count Sandor Vay, who pretended to have fallen out with his family in Hungary, married a teacher at Klagenfurt, aged twenty-seven, daughter of an inspector of woods and forests. The marriage took place in Hungary, a certain Father Imre officiating. The newly-married couple, after living together for some time, visited the girl's parents at Klagenfurt. Ere long it was found that the so-called Count was in reality a woman of thirty-six, the Countess Sarolta Vay, daughter of the late Colonel of Honveds, Count Ladislaus Vay, one of whose daughters, named Sarolta, had been educated as a boy. All her life she had worn male attire, and

had appeared in the uniform of the Honveds. She published a collection of poems under the name of Sandor, and associated with young men, who were not in the secret, in manly amusements. After disappearing from Pesth she was not again heard of till her arrest on the demand of her nominal father-in-law at Klagenfurt. Eventually the mystery was solved by the confession of the female bridegroom, who stated that she had arranged the sham marriage with the girl Engelheart, who knew of her sex. Their object was to obtain money from the girl's father, which the two damsels then spent together in amusements. Another case is on record of two women living together as man and wife, by mutual consent, for thirty-six years. They kept a public-house at Poplar, and the secret was let out by the "wife" making a confession on her deathbed.

67. Which is the shortest street that goes under such a name?

Mansion House Street, in the City of London. It is not more than a few yards in length, its roadway being in front of the Mansion House, and between it and the few houses opposite. Kelly's "Post Office Directory" of London, for 1891, has only the following entries in this, the smallest of all streets, viz.: Mansion House Street, E.C.: opposite, Mansion House; Equitable Assurance Society. Though the shortest, it is the busiest street in the busiest city in the world, and through it ceaselessly from 8 a.m. till 7 p.m., every weekday, pours an endless stream of traffic—vehicles and passengers—from the following arteries of London, namely, Cheapside, Princes Street, Threadneedle Street, Cornhill, Lombard Street, King William Street, Queen Victoria Street, and Walbrook.

68. Where is the longest public swimming bath in this country?

The Crown Swimming Baths at Kennington, London, are 160ft. in length and 60ft. in width, with a varying depth of from 3ft. 3in. to 7ft. The Cleopatra Swimming Bath in the Thames near Charing Cross Pier is 133ft. long by 25ft. wide, the iron building with its glass roof measuring outside 180ft. in length and 30ft. in width. The largest bath in the world is in the United States, at Waco, in Texas. It holds 80,000 gallons of water, is supplied from an artesian well 1,870ft. deep, and is refilled every two hours. There are found two immense baths, one for each sex, in which 800 persons can disport themselves with ease and comfort.

69. What is the weight of water in the largest ocean in the world?

The bulk of water filling the Pacific, which is much the largest ocean in the world, is estimated to be one hundred and seventy million cubic miles, and the weight of this mass, at 64lb. to each cubic foot of sea-water, is 714,961,481,070,000,000 tons. The Atlantic Ocean is not quite half as large as the Pacific, their respective areas being as follows:—

	Square miles.
Pacific	50,309,000
Atlantic	24,536,000

70. Has the Burial Service ever been read at the top of a blast furnace?

This was done in December, 1891, over the ashes of John McAllister, one of the men employed at the works of the North Lonsdale Iron and Steel Company, at Ulverston, in Lancashire. McAllister fell into one of the blast furnaces which was then in operation, and his body was instantly consumed. The Reverend Father Allan read the Burial Service from the gangway at the top of the line of furnaces over all that remained of the unfortunate workman. The Burial Service was also read at the top of a furnace at Carnforth, under similar circumstances, two months prior to the Ulverston fatality.

71. Is there any church in this country round the walls of which urns containing the ashes of deceased worshippers are placed?

The bodies of three of the Hanhams, of Dean's Court, Wimborne, in Dorsetshire, have been cremated, and the ashes placed in urns in the church. Two of them were those of the wife of Captain Hanham and of his mother, Lady Hanham, wife of the late Sir James Hanham, Bart. These ladies had died in 1876 and 1877 respectively, and on the 8th and 9th of October, 1882, their bodies were burned in the coffins of wood and lead in which they had been buried in the family vault. In the church at Woking Cemetery, adjoining the crematorium, there are rows of niches in the walls, in which are deposited urns containing the ashes of deceased worshippers whose bodies have been cremated. On the wall of Park Green Church, Macclesfield, there is an urn containing the ashes of a deceased member of the congregation, while round the walls of the Theistic Church, Swallow Street, Piccadilly, London, there are to be seen several urns containing the ashes of deceased worshippers.

72. Which colony has paid most for Royal Commissions?

New South Wales, in which colony the cost of Royal Commissions during the past four years has amounted to £25,603. Among the principal Commissions may be mentioned the following:—

Royal Commissions.	Cost.
Public Service	£7,700
Rabbits	6,129
Casual Labour	3,300
Strikes	2,895
City Railways	2,700

73. How many anti-vaccinationists are there in this country?

From a calculation made by a Fellow of the Royal Statistical Society, based on a household census made in sixty-three towns and districts in England, the number of people who are opposed to compulsory vaccination is 87 per cent. of the adult population, while 68 per cent. are in favour of its abolition altogether. There are ten places where the number of unvaccinated children exceeds 25 per cent. of the children born, namely: Keighley, 75 per cent.; Leicester, 72 per cent.; Gloucester, 58·8 per cent.; Oldham, 44 per cent.; Luton, 33·6 per cent.; Eastbourne, 32 per cent.; Dewsbury, 29·6 per cent.; Halifax, 28 per cent.; Kettering, 27 per cent.; and Northampton, 25·7 per cent. The mortality from small-pox in London has been estimated at 15 per cent. among vaccinated persons, and 45 per cent. among unvaccinated: in Montreal, 10 per cent. vaccinated, and 54 per cent. unvaccinated; Boston, 15 and 50; Philadelphia, 17 and 64. In Norway, vaccination is not compulsory, but only those who submit to be vaccinated are allowed to vote at elections.

74. What is the longest distance ridden on a bicycle in twelve months?

Ten thousand miles, completed by Nelson Bradt during the year 1891. A Dalziel's cablegram, dated Johnston (N.Y.), December 21st, 1891, stated that Bradt had just completed the ten thousand miles bicycle ride, which he began on January 1st. Bradt now holds the championship for the best twelve months' record, the longest distance previously attained being 8,350 miles.

75. Where is the biggest laundry in the world?

That at Peckham, owned by Mr. James Hayes, and known as the Royal Bleaching and Cleaning Works. In this steam laundry there are two calendering rooms, each 115ft. in length, with machinery capable of calendering 50,000 table napkins

daily, as well as four drying rooms, each 115ft. in length, containing nearly seven miles of drying poles. The drying rooms will hold 30,000 pieces at the same time, all of which can be dried in thirty minutes. Three engines and five boilers are required to do the work of the laundry, which is also fitted with all the latest appliances for accomplishing the work speedily and well. Thirty thousand pieces of linen are washed and finished daily. Another large London steam laundry, situated at Peckham, is that of Mr. Clements, which covers an area of nearly three-quarters of an acre, and has a capacity of from twenty to thirty thousand pieces per day. There are seventeen public baths and washhouses in London, the washhouse portions of many of which are of considerable extent, giving to thousands of laundresses facilities for their work by the use of steam-washers and drying closets, which they could not otherwise obtain. Thirty thousand laundresses of Paris still use the primitive plan of washing in the river, there being established for their use large floating laundries on the Seine.

76. Which animal can speak most distinctly?

Next to man, the mina, one of the Grackle species of birds, found in tropical and sub-tropical countries, excels all other animals in its imitative powers, and particularly in the imitation of human speech. When domesticated these birds far excel the parrots, both in picking up the words and speech of those by whom they are surrounded, and in the distinctness with which they speak the words and sentences learnt. So distinct, in fact, is the utterance of the mina and of some species of parrots which most nearly approach it, that persons hearing them speak at once look round for the human being they believe to have addressed them, and have some difficulty in realizing that the voice was only that of a bird. A specimen of the mina, or hill-mina, as it is called, may be seen at the Zoological Society's Gardens, Regent's Park, London. On its arrival it was placed in the tortoise-house. The hill-mina is a small bird, shining coal-black in colour, with a bright orange stripe about its head, orange legs, and a sharp, salmon-coloured bill, and can speak and laugh in perfect imitation of man, joining in most intelligently in conversation.

77. What is the greatest age that a tortoise has been known to attain?

Between 150 and 200 years, so far as is known. A tortoise which lived at Peterborough Cathedral was known to have attained the patriarchal age of 180 years before it died. Its

death was caused by an accident, and Bishop Jeune had its shell preserved, with an inscription narrating its age and history. Another tortoise, which Laud brought from Fulham to Lambeth when he became Archbishop, was 130 years old when it died, and during its life had outlived eight Archbishops. Its death was caused by the carelessness of the gardener, who dug it out of its hole one winter, and omitted to provide it with another habitation. A tortoise, which died in Chelsea, had been with the same family for over a century, and responded to the name of "Tommy."

78. Who is the owner of the most expensive bicycle?

The Sultan of Morocco owns the most expensive cycle, the whole of the framework of which is nickel-plated, and which cost him three hundred guineas. An electric cycle, which was guaranteed to run twenty-eight miles without re-charging, cost £100. The most expensive bicycle was the steam one of Mr. Copeland, which was invented by him. It is of the star pattern, with a small wheel in front, and attached to the front bar is a vertical brass boiler heated with gasoline. A miniature engine mounted on a bar above the boiler has a stroke of three inches, with a cylinder of 1/8in. diameter. Below the engine is a spherical reservoir holding a quart of water, and above it a cylinder holding as much gasoline. A round belt communicates the power of the engine to a 30in. wheel attached to the wheel of the bicycle. The engine makes 180 revolutions of the 1½in. crank in a minute, and nine revolutions turn the large wheel once. The engine runs for an hour without renewal of water or gasoline, and engine, fuel, and boiler do not add more than 20lb. to the weight of the bicycle. The machine has the ordinary pedals, which can be used when desired.

79. Has cricket ever been played on the ice?

Yes; several instances have been recorded of cricket matches played on the ice. The frontispiece to Parry's "Second Voyage in Search of a North-West Passage" represents a cricket match on the ice between the crews of the *Hecla* and the *Fury*, which took place in March, 1823. At Harewood, in Yorkshire, a match on the ice took place on the 15th of February, 1838, between Harewood and Stark, in which Harewood scored 468 runs in a completed innings, and Stark 212 with six wickets to fall. One of the players made thirteen runs from one hit. The Sheffield Skating Club played a cricket match on the ice at the Duke of Devonshire's seat—Chatsworth—on the 1st of March, 1848. The ball was of

gutta-percha, and the scores, 160 and 150. On the 1●th of January, 1851, the Long Meadow at Oxford became covered with a thick coat of ice, when a match was got up, and lasted the whole day. One side made 126 and the other 128 runs. A cricket match was played on a large reservoir at Daventry, in 1854. At a match played nearly twenty years ago in the fens of Swavesey, some of the crack cricketers of the day took part. The sides were All England and Universities against Sixteen of Swavesey. On the 26th of January, 1880, a match on the ice was played between Swansea and Cadoxton, the former scoring 126 and the latter 311. The victors in this last match were much assisted by the admirable fielding of a retriever.

80. Who is the owner of the finest river house-boat?

Mr. Pierre Lorillard, the well-known American millionaire, who owns a river house-boat, built for him by the Pusey and Jones Company, of Wilmington, Delaware. She is a steel scow, or flat-bottomed boat, with round spoon-shaped end, and is driven by two screw propellers, each actuated by a separate engine of 200 horse-power. Her draught is 30in. at most, and her maximum speed nine knots. She is 97ft. 6in. long and 26ft. 6in. broad. A pine-wood house is built over the hull, and she is replete with every accommodation that money can procure for the benefit of Mr. Lorillard and his guests. The windows are fitted with wire mosquito nets: there is a studio for artists on board, while horses and dogs can be put up for purposes of sport, and there is an ice-house for the convenience of the cook. It cost over £10,000. The house-boat belonging to the Magdalen College, Oxford, is 82ft. long and 18ft. wide, is beautifully finished and decorated, being ornamented with gold scrolls and grotesque figures of dolphins. It can accommodate 1,200 persons, and cost about £2,500.

81. Which candidate for Parliamentary honours has suffered the greatest number of defeats?

Mr. George Holloway, of Farm Hill, Stroud, who, in 1886, was elected member for Gloucestershire, Mid or Stroud Division, had previously suffered four defeats, having three times unsuccessfully contested the Borough of Stroud, and once the Stroud Division of the county, namely, at the 1874 General Election, at a by-election in the following May, and at the General Elections in 1880 and 1885. Five other candidates for Parliamentary honours have likewise suffered four defeats, namely, Henry Matthews, who

entered Parliament as member for Dungarvan, but on three subsequent occasions unsuccessfully contested the same seat, and was also an unsuccessful candidate for North Birmingham in 1885. W. Wren, who was elected for Wallingford in 1880, but unseated on petition, unsuccessfully contested Wigan in November, 1882, and North Lambeth at the General Elections 1885 and 1886. S. Stern unsuccessfully contested Mid Surrey in 1880, and also a by-election in June, 1884, the Tiverton Division of Devonshire in 1885, and Ipswich in 1886. W. S. Caine unsuccessfully contested Liverpool in 1873 and 1874, the Tottenham Division of Middlesex in 1885, and Barrow in 1890. Sir J. Dorrington unsuccessfully contested Stroud in February, 1874, was elected in May, 1874, but unseated on petition, and unsuccessfully contested the same division in 1880, and the Cirencester Division in 1885.

82. Which dinner had the greatest number of courses?

In April, 1890, a dinner was reported, at which two hundred different dishes were put upon the table. Allowing four or five dishes to each course, there must have been at this dinner between forty and fifty separate courses, which is much the greatest number on record. It was also stated that five of the guests tasted every dish. A dinner of fifteen courses, costing £15 per head, was given some time since at the Savoy Hotel, London, by two gentlemen, to ten old friends. It was presented in a most elaborate manner, the dessert fruit being served from trees on the table, and eleven different varieties of wines and liqueurs were handed round during the repast. Many of the Roman Emperors and citizens spent fabulous sums on their principal meal, usually partaken of about six o'clock in the evening. In the case of the Emperor Vitellius, the expenses of his table, during eight months of his reign, were estimated to have been five millions sterling, the cost of one of his meals being put at £48,000.

83. Which are the most costly feathers in the world?

The feather or tuft of feathers at the apex of the Prince of Wales's crown was taken from the tail of the feriwah, of the bird of paradise species. These feathers are the only ones of their kind, and are valued at £10,000. It took twenty years to get them, and caused the death of more than twenty hunters before they were obtained. To get these tail feathers in full beauty, it is necessary to pluck them from the living bird, as instantly after death the plumage becomes lustreless. What makes the pursuit of the feriwah so dangerous is that the bird always inhabits the haunts

of tigers, and seems to have some strange affinity to those animals. For some time past numbers of men, formerly employed at the cattle ranches of Buenos Ayres, have taken to shooting the mirasol, a bird found in that province, its feathers being greatly in demand and very valuable, fetching at least 2,500 dollars per kilo, which is equivalent to about £220 per lb. Good ostrich feathers are worth between £40 and £50 per lb. A single feather of the scarlet ibis is worth about £15, while the plumage of the sun-bird is valued at the same amount. The ornamental feathers imported into this country yearly exceed 800,000lb. in weight and a million sterling in value. Some forty millions of humming-birds, sun-birds, orioles, gulls, sea-birds, waxwings, birds of paradise, and flycatchers are annually used throughout the countries of Europe for decorating women's hats and dresses.

84. Has iron-rust ever been the cause of fire?

When oxide of iron is placed in contact with timber excluded from the atmosphere, and aided by a slightly increased temperature, the oxide will part with its oxygen, and is converted into very finely divided particles of metallic iron, having such an affinity for oxygen that, when afterwards exposed to the action of the atmosphere from any cause, oxygen is so rapidly absorbed that these particles become suddenly red-hot, and if in sufficient quantity will produce a temperature far beyond the ignition point of dry timber. Whenever, for instance, iron pipes employed for the circulation of any heated medium—whether hot water, hot air or steam—are allowed to become rusty in close contact with timber, the mere expansion or contraction of the pipes may be sufficient to raise the temperature to a sufficient height to bring about fire.

85. Which actress has played the greatest number of parts?

Amongst living actresses, Mrs. Kendal (Madge Robertson) has played the greatest number of parts. Like nearly all great players, Mrs. Kendal was born in the profession, and began to perform nearly as soon as she could walk and talk. Her first appearance, at the age of four, was at Chute's Theatre at Bristol (where her mother was acting) as an angel in "Uncle Tom's Cabin." "Both my father and mother," says Mrs. Kendal, "were on the stage; so were my grandfather and grandmother; so were my great-grandfather and great-grandmother; so were my aunts and uncles, my great aunts and uncles, my brothers and sisters, and my nephews and nieces."

Mrs. Kendal in the course of her career has acted in all descriptions of dramatic work, from tragedy to burlesque, and excelled in all, though light comedy is that in which her talent is universally recognised as supreme. Mrs. Langtry has performed the characters of some seventy-eight different personages during her dramatic career. Miss Minnie Palmer has appeared most frequently in the same character, "My Sweetheart," a piece which has had very long runs.

86. What is the length of the longest ladder ever made?

One hundred and fifty feet. The fire-escape ladders are the longest made, and when extended to their full length reach to heights ranging from sixty to a hundred and fifty feet. Those in use by the London Fire Brigade consist of a main ladder, the sides of which are strengthened with patent wire rope, and fitted with an uninflammable trough of copper-wire netting, in which persons may slide with ease and safety from a window to the ground; a fly-ladder, jointed to the main ladder, along which it lies when not in use, and raised when required by ropes and levers; a third or detached piece called the first-floor ladder, which, when not in use, is carried under the main ladder, but can be jointed to the end of the fly-ladder; and a fourth piece known as the supplemental length, which can be added when the greatest total height is required. The whole is mounted on a light carriage with springs and high wheels, and can be moved anywhere by two men. Ladders in use by painters are in some cases of great length, and vary from sixteen and twenty to one hundred feet. If greater heights are required, two or more ladders are lashed together by ropes.

87. Which artist in this country has the most extensive studio?

The three largest studios in this country are those of Sir J. E. Millais, Hubert Herkomer, and B. W. Leader. The studio of Millais, at his residence, Kensington Palace Gate, London, is a vast, lofty room, lit by one enormous window. The artist gets to work early in order to make the best use of daylight, which he prefers, although the studio is fitted with the electric light, which can be used when necessary. Mr. Leader's studio in his house in Surrey is a magnificent room, as large as a small house, and flooded with light from a window which occupies almost the whole of one side. Mr. Leader has the reputation of being a faster worker than any other living artist. The house was built by Norman Shaw for the late Frank Holl, from whom Mr. Leader purchased it, and he subsequently

added two large wings to the original structure. Professor Herkomer's studio is at Bushey, where he has established a school of art, and where he has more than one lofty studio of great size. The house is full of art treasures and some marvellously carved furniture and ornamentation, the work of the artist's father and uncle, who are both clever wood-carvers. At Redcliffe Gardens, Kensington, there is a long line of studios almost a quarter of a mile long, all under one roof. This is possibly the most extensive suite of artists' studios in the world.

88. Which coroner in the United Kingdom receives the largest annual remuneration?

Dr. Danford Thomas, coroner for the central district of the County of London, whose salary has been fixed for the period 1892-1897 at £2,244 per annum. The salary of Mr. Wynne E. Baxter, coroner for East London, during the same period has been fixed at £1,674 per annum. The salaries are re-adjusted every five years, according to the number of inquests held during the previous quinquennial period, and are based on the rate of thirty shillings per inquest; such salaries, in lieu of fees, covering all the expenses of the office. The number of inquests held yearly by the coroner for Central London during the previous quinquennial period was 1,496. The Lord Chief Justice (salary £8,000 per annum) is the principal coroner in the kingdom, and may exercise jurisdiction in that capacity in any part of England, but that part of his jurisdiction has no special or separate salary attached to it. There are 253 coroners in England and Wales. One hundred and ninety-nine are county coroners. All boroughs with a population of 10,000 are entitled to one. In 1891 the total cost of inquests amounted to £103,291, or £3 4s. 6d. for each case reported upon. Inquests were held over 32,027 bodies, 11,030 being those of females.

89. Where is the most expensive fishing in this country?

The fishings on the Tay belonging to Sir James T. S. Richardson, of Pitfour, were let in one lot for the year 1892 to Mr. John Strachan, Errol, for £1,675. The fishings on the Tay and Earn belonging to the Earl of Wemyss and March were let for the season of the same year by public roup at Perth, when the highest letting was the fishing at Girnal for £290. The whole of such fishings for the season of 1890 were let for £1,601, while for the season of 1892 they only brought £1,266, or a decrease of £335. The whole of the fishings in Scotland bring in a rental of between £90,000 and £100,000 per annum. The 360 tons of salmon caught annually

in England and Wales are commercially worth £111 a ton; the 3,200 tons caught in Ireland, £110 a ton; the 2,800 tons caught in Scotland, £107 a ton. London consumes nearly one-third of the total quantity of our salmon fishery. The total consumption of British and imported salmon in London is over 5,000 tons every year, or about 3lb. per inhabitant.

90. Has a legless cyclist ever lived?

A seaman, named James Macintosh, suffered so severely in the Arctic regions, while on a voyage some years ago with the Dundee whaler *Chieftain*, that he was obliged to have both his legs amputated. Notwithstanding his loss of limbs he was able to ride on a tricycle, and in 1889 made a journey from Broughty Ferry, Scotland, to the Paris Exhibition, doing the land portion of the journey on his tricycle. He travelled *viâ* London, Dover, and Calais, and took three weeks to accomplish the distance. Mr. F. Tyler, of the Clarendon University Press, Oxford, had his legs amputated some eighteen years ago, and for fifteen years has used a tricycle, working the wheels by handles.

91. What is the amount of the biggest legacy bequeathed to an animal?

Two hundred guineas a year, which Elizabeth Orby Hunter, of Upper Seymour Street, London, widow, bequeathed to her parrot, which she described as her "faithful companion of twenty-five years." The bequest was carefully guarded against fraud or misappropriation, and elaborate provisions were made for its comfort and guardianship. Mrs. Hunter directed twenty guineas to be expended on a large and lofty cage for her parrot. Frederick Harper left £200 a year to his "young black cat." The Count of Miradola bequeathed a considerable legacy to a pet carp. Dr. Christiano, of Venice, left 6,000 florins for the maintenance of his three dogs, with a condition that at their death the sum should revert to the University of Vienna. Mr. Berkely, of Knightsbridge, who died in 1850, left £32 to his four dogs, who were descended from one which had protected him and saved his life. He also ordered that the busts of these four dogs should be carved in stone, and placed at the four corners of his tomb. A bequest of an opposite character was one of £20,000 by an old lady at Wilmington, Connecticut, to be used in the suppression of "the pernicious habit of keeping dogs"; the money to be used in repainting the houses of residents in the town who could prove that they had not had a dog for two years.

92. Which lady of title in this country is a practical compositor?

Princess Louise of Battenberg, under the instruction of her husband, has acquired the art of type-setting, and is very expert at it. Lady Colin Campbell is also an expert compositor, and has set up the type for several of her literary productions for private circulation. The late Lady Brassey was very expert as a compositor. Madame de Stael, wife of Baron de Stael, who, about a century ago, was such a distinguished leader in French literary and political circles, stated that what she was most proud of was the fact that she had acquired seventeen trades (one being that of a compositor), by any one of which she could make a livelihood. In Edinburgh printing offices there are over 300 female compositors.

93. How many different languages are spoken in Europe?

There are 587 different languages spoken in Europe, though philologists look upon numbers of these as merely variations or dialects of about fifty distinct languages which they credit Europe with possessing. The number of persons speaking the seven principal European languages in 1801 and 1890 is as follows:—

	1801.	1890.
English	20,520,000	111,100,000
French	31,450,000	51,200,000
German	30,320,000	75,200,000
Russian	30,770,000	75,000,000
Spanish	26,190,000	42,800,000
Italian	15,070,000	33,400,000
Portuguese	7,480,000	13,000,000

The majority of the languages of Europe are derived from the Indo-European or Aryan, the Teutonic branch including German, English, Dutch, Flemish, Swedish, Norwegian, and Danish; the Slav branch including Russian, Polish, Czech, Slovak, Serb, Croat, Slovenian, and Bulgarian; the Celtic including Welsh, Breton, Irish, Gaelic, Celtic, and Manx; the Romance including French, Italian, Spanish, Portuguese, and Roumanian. The non-Aryan languages are those of the Magyars, Finns, Tartars, Turks, Circassians, and Maltese.

94. When did the first Parliament meet in this country?

Parliament derives its origin from the Witenagemot, or great council of our Saxon Kings, the earliest meetings of which are recorded as taking place in the reign of King Ina of Wessex (688–727). Between A.D. 800 and the Conquest, many of these national councils met at Winchester. William the Conqueror, in the fourth year of his reign, summoned, by the

advice of his barons, a council of noble and wise men, and twelve were returned out of every county to show what the customs of the kingdom were; but this assembly, though, in the opinion of Lord Hale, it was "as sufficient and effectual a Parliament as ever was held in England," bore little resemblance to a legal summons of the commonalty as an estate of the realm. After the summoning of several councils for specific purposes, in which the principle of representation was more or less distinctly recognised, at length, during the reign of Henry III. (1265), writs were issued to the sheriffs, directing them to return two knights for each county, and two citizens or burgesses for every city and borough, to meet at Winchester; and this, says May, in his "History of Parliament and its Procedure," was the first clear recognition of the Commons as an estate of the realm in Parliament. The 22nd day of January, 1265, was, therefore, the date of the first meeting of Parliament in this country—that is, a Parliament in which the House of Commons consisted of representatives duly elected by the people.

95. Which individual is credited with wearing a different suit of clothes every day?

Prince George of Prussia, cousin of the Emperor, is an elderly gentleman, who takes no part in the fashionable show of the world, but has a mania for wearing a different suit of clothes every day of his life. Unlike the rest of his illustrious family, he detests uniform, and never appears in one if he can possibly help it. The Prince of Wales is one of the best-dressed men in Europe. His wardrobe has a different suit of clothes for every day of the year, and a careful inventory of his articles of dress showed him to be possessed of no fewer than four hundred pairs of trousers. In the reign of James I., that monarch and his courtiers are said to have set the fashion of appearing in a new garb almost every day. The Duke of Fife never wears the same clothes twice in the same week. The most expensively-dressed man in the late House of Commons was Mr. Hulse. His shirt and collar bill was said to amount to £300 per annum. The Duke of Portland spends £500 a year upon his underclothing, as everything he wears is made of silk.

96. What is the most curious material out of which a wedding-ring has been made?

Amongst the curiosities of wedding-rings, it is on record that in the early days in this country rings were made of rushes. Perhaps the most curious material used for rings

required on an emergency is the case of one being hurriedly made by cutting it out of the finger of a glove, and another cut out of a visiting-card. Many cases are on record of rings made of brass and iron being used, as also curtain-rings and door-keys being pressed into service at weddings. The Quakers and Swiss Protestants do not use rings at their marriage ceremonies. The Irish people have a strong objection to any but gold rings. In St. Kilda wedding-rings are made of worsted. The women of the Upper Bayanzi, on the Congo, wear their wedding-rings around their necks. These rings are made of thick brass rods, which are made into great rings and strongly welded together. The more wealthy the husband the heavier the ring ; in some cases they weigh 30lb.

97. In which heathen temple is the most ancient idol?

In the temple of Mecca, wherein is a square stone edifice, which, by tradition, is said to have been built by Abraham and his son Ishmael. It is this part of the temple, known as the Caaba, which is principally reverenced by the Mohammedans, and to which they always direct their prayers. The edifice is indisputably extremely ancient, and its original use and the name of its builder are lost in a cloud of traditions. The Mohammedans affirm that it is almost coeval with the world, and that Adam set it up after his expulsion from Paradise. After Adam's death, his son Seth built a house of the same form, which, being destroyed by the flood, was rebuilt by Abraham and Ishmael after the same model. In the corner next the door on the east side is the "black stone," the most celebrated idol amongst Mohammedans. This stone is set in silver, and, according to the Moslems, was one of the precious stones of Paradise which fell down to the earth with Adam, and, being taken up again, or otherwise preserved at the Deluge, was brought back by the Angel Gabriel to Abraham when he was building the Caaba. It was at first whiter than milk, but became black by the sins of mankind, or rather by the touches and kisses of so many people, the surface only being black, the interior part still remaining white. This stone has been the object of idolatrous worship from the most remote times to the present day. The outside of the Caaba is covered with rich damask, changed every year, which is provided by the Turkish rulers. The covering for the Caaba sent by the Sultan to Mecca was valued at £15,000, and that sent by the Khedive of Egypt £11,600. Pilgrims who have performed the holy journey to the Caaba and kissed its ancient idol never omit to add the proud title of Hadj to their name.

98. Has a marriage of dolls ever been celebrated?

Such a marriage was some years ago celebrated by the direction of Nawab Sultan Nawaz Jung, one of the best known of the noblemen at the Nizam of Hyderabad's capital. The whole of his household were busily occupied for a week at the celebration. The ceremony was conducted with great splendour, and was got up for the pleasure of the grand-daughter of the Nawab, a child seven years of age. A marriage of dolls takes place yearly in Venice, with great ceremony and public rejoicing. Another doll ceremony is carried out annually at Douai, a small town in France, on the first Sunday after the 6th of July, when a family of immense dolls promenade the streets. The father, named Gayant, wears a complete costume of an ancient knight; he is 22ft. high, and his body is a wicker-work frame; his movements are controlled by men concealed in the framework of his legs. This wicker-work doll is accompanied by his wife, Marie Cagenon; she is 20ft. high, and wears the costume of the Court of Marguerite de Valois; three children are with them, a son, 12ft. high, and two daughters, 10ft. and 8ft. high respectively.

99. In which thunderstorm was the greatest number of flashes of lightning?

In that thunderstorm which occurred on the 6th of June, 1889, when, as reported by Mr. Sowerby Wallis in the quarterly journal of the Meteorological Society, there were 1,244 distinct flashes of lightning in the two hours ending with 11 p.m. on that day. According to Professor Symons, F.R.S. (colleague of Mr. Sowerby Wallis), this is the greatest frequency of lightning flashes on record. Professor Symons said that, in the storm on the 28th June, 1892, "the total number of flashes between 8.30 and 10.30 p.m. was 902, or only three-fourths of the number in 1889; but for several minutes, about 10 p.m., the number exceeded twenty per minute, and in two or three instances reached twenty-five per minute. With the brontometer I have only to press a key and obtain, not merely the total number of flashes, but the time, true to a single second, at which each occurred."

100. What is the best method of planting trees?

The reason why so many trees planted in this country fail to thrive is owing to the carelessness with which the planting operation is performed. The soil at the bottom of the hole into which the tree is to be put shou'd be loosened and room made for all the root fibres. The tree, after a small quantity of mould has been shovelled in, should be moved gently up-

wards and downwards, to insure the fibres being covered, and then the remaining mould filled in. Another most important point is to afford the tree, until it has established itself, some protection against the power of the sun. "I have," says a nurseryman, "planted several thousands of trees during the last ten years, and have seldom been called upon to replace one that has died. The success is the result of a very simple but seldom-failing precaution. When the tree is planted, a piece of wood, not less than three inches wide, and high enough to reach the lowest branches, should be driven into the ground just south of the tree. This keeps the sun off it during two-thirds of the day, and prevents the sap and bark being burned up before new roots have been formed. Anyone adopting this plan will be certain to have success with his trees, no matter how poorly they look when first planted."

101. Where is the largest toy factory in the world?

The largest toy factory in the world is in New York, where playthings in tin are manufactured literally by the million. It stands five stories high, and turns out 1,607 distinct varieties of tin toys. No. 1 in the catalogue is a tin horse; 1,607 a tin menagerie. The output of circular tin whistles is twelve million per annum. To make a tin horse twelve inches long, dies have to be cast costing £600. Jumeau, of Paris, makes 2,000 dolls a day, nearly all of considerable size; every year France exports toys to the value of three millions sterling, chiefly dolls; of which toy in various sizes 26 millions are estimated to be manufactured and sold in Europe annually. Toys are imported to England chiefly from Germany and Holland, the former country sending us an annual supply of the average value of £320,000; that from Holland being worth £125,000; from France, £90,000; and that from Belgium over £70,000. Nuremberg, in Bavaria, is the great centre of the German manufactures of this kind, whence come what are known as "Dutch" toys. All the tin soldiers, packed in wooden boxes, produced in Germany come from Sonneberg, in the Duchy of Saxe-Meiningen.

102. How many Bills have been passed by both Houses of Parliament to which the "Royal Assent" has been refused?

The last occasion when this power of veto was exercised was in 1707, when Queen Anne refused her assent to a Bill for settling the militia in Scotland. In former times the refusal of the Royal assent was a common occurrence; the words used on such occasions being "La Reine s'avisera." William

III, in 1693, refused assent to the Bill for triennial Parliaments, and in the same year to another Bill known as the "Place Bill," the object of which was to exclude all holders of offices of trust and profit under the Crown from the House of Commons. This last refusal was followed by the Commons resolving that "whoever advised the King not to assent to the Act, which was to redress a grievance, was an enemy to His Majesty and the kingdom." An address conformable to the resolution was presented to His Majesty by the whole House. The King returned a polite answer to parts of the address, but took no notice of what was said about the rejection of the Bill. It was subsequently moved in the Commons, "That application be made to His Majesty for a further answer," but the motion was negatived by 229 to 28.

103. In what part of the United Kingdom is a measure called a "blue" in use?

In Wales. In 1891 a deputation of Welsh licensed victuallers waited upon the President of the Board of Trade to ask that this measure called a "blue," which contains two-thirds of a pint, and is universally used in Wales, should be legalized. The President held out no hope that this would be done, as he observed that if such measures as "blues" were legalized for Wales, Londoners would ask for "threes" to be legalized, and other districts in various parts of the kingdom would immediately come forward in favour of their particular local customary measures, which would lead to great confusion and possible fraud.

104. Has any man had his own statue prepared while he was alive?

The late Mr. Barnum, the "Prince of Humbugs," is entitled to this distinction. The statue is of bronze, about 7ft. in height, and represents him seated in a great arm-chair. It was made in Europe, on his personal order, and, on arrival in America, in 1887, from Bremen, was packed away in one of the great storage warehouses of New York, with instructions that no one should be permitted to see it until after his death. In the Friedrichstrasse, Berlin, is a show which contains a statue in bronze of Mr. Windthorst, the chief of the Ultramontane party. He is represented life-size, seated in an arm-chair, and holding the manuscript of a speech in his hand. The Pope intends to have his own monument made. It is to consist of a large sepulchral urn, upon which will be a life-size statue of himself. At either side are two colossal statues of Religion and Justice. The statues are of Carrara marble, and the urn of porphyry. The work will take three years, and will cost £5,000,

105. Have plants ever been worshipped?

Large numbers of plants have been worshipped amongst the nations of the East, including the lily, the myrtle, and the onion, the latter having been an object of worship amongst the Egyptians. The Jains, a religious sect, very numerous in Bombay, worship five grades of life: first, trees and plants; second, worms; third, ants and creeping things; fourth, winged creatures; and fifth, all higher animals. In the Tonga Islands of the Pacific Ocean the natives lay offerings at the foot of particular trees, with the idea of their being inhabited by spirits. The Talein of Burmah, before they cut down a tree, offer prayers to its "kaluk," or inhabiting spirit; and the Siamese offer cakes and rice to the takhien-tree before they fell it, and believe the inhabiting nymphs or mothers of trees pass into guardian-spirits of the boats built of the wood. In Ceylon the Bo-tree is found in the precincts of every Buddhist temple. At Anarajapoora there is one of these trees of peculiar sanctity, to which thousands annually repair to offer prayers for health and prosperity.

106. In which Parliamentary election has a member been returned with the greatest majority?

In the 1892 election for the Welsh Borough of Merthyr Tydvil, when Mr. D. A. Thomas, who was returned at the head of the poll, had a majority over his Conservative opponent of 9,644 votes. Mr. W. P. Morgan, the junior member for Merthyr Tydvil, had a majority of 9,452 votes over the Conservative, Mr. F. T. Williams, who polled 2,304 against the 11,918 of Mr. Thomas and the 11,756 of Mr. Morgan. During this General Election there have been three other party majorities of over 5,000, namely, in the Romford Division of Essex, where Mr. Theobald polled 6,724 against his opponent's 1,200, giving him a majority of 5,524; West Monmouthshire, where Mr. E. M. Warmington polled 7,019 against his opponent's 1,709 (curiously the same figures differently arranged), giving him a majority of 5,310; and Swansea District, where Mr. Vivian polled 5,959 votes against his opponent's 923, giving him a majority of 5,036. At the City of London election the majorities of Sir R. Hanson and Mr. A. G. H. Gibbs were 6,345 and 5,051 respectively, but both elected and unsuccessful candidates were Conservatives. In the 1885 General Election Sir R. N. Fowler headed the poll for the City of London with 12,827 votes, or 7,010 majority over his Liberal opponent, Mr. Stephen P. Low, who polled 5,817 votes.

107. What is the highest price ever paid for an arm-chair?

Forty thousand pounds, being the cost of the arm-chair presented by the City of Augsburg to the Emperor Rudolphus II., of Germany, about the year 1575. The chair, which is of steel, took the artist about thirty years to make. The large compartment at the back of it represents Nebuchadnezzar asleep; the statue about which he dreamed is standing before him; and just adjoining is a representation of the King on his throne and Daniel before him explaining the dream. The chair became the property of Count Tessin, Ambassador from the Court of Sweden to the English Court. Gustavus Brander afterwards bought it as an antique for 1,800 guineas, and sold it to the Earl of Radnor for 600 guineas. An ivory arm-chair, presented to Gustavus Vasa by the City of Lubeck, was sold in 1825 to the Swedish Chamberlain for 58,000 florins, or upwards of £4,800. Some time ago a number of chairs, formerly owned by celebrated men and collected as relics, were sold by auction, and brought the following prices: Shakespeare's, £120; Gay's, £30; Theodore Hook's, £19; Bulwer Lytton's, £13; Anne Boleyn's, £10 10s.; Charles II.'s, £10; Mrs. Siddons's, £7; Pope's, £5 10s.; Mrs. Browning's, £5; Thackeray's, £3 10s.; Walter Savage Landor's, £3 10s.; Lord Byron's, £2 10s.; Sir Walter Raleigh's, £2. A Birmingham firm has made a beautiful cut crystal chair for an Indian rajah. It is composed of crystal columns and pieces with polished facets, and is covered by a crystal dome or canopy, which is lighted beneath by three incandescent electric lamps. Its cost was £300.

108. Did a duel ever take place on a tight-rope?

In Dublin, at the beginning of this century, there were two rivals in the art of rope-dancing, a Frenchman named Perote, and an Italian, Signor Sarfuico, who, after trying in every way to outvie each other, agreed to perform together in a "dance of friendship." The two men on the rope were in the full dress of the period, with lace ruffles, bag-wigs, and swords. Signor Sarfuico, in beginning, seemed to have some difficulty with his feet, which Perote perceiving, caused him to make some remark which aroused the Italian's anger, who raised his hand as if to strike; the same instant Perote's rapier was drawn, and before the audience could comprehend that they had quarrelled, Sarfuico's sword was out also, and the two were thrusting at each other on the tight-rope. Both were good swordsmen, but Perote was the better of the two. He warded off the Italian's thrusts with

his rapier, till Sarfuico, making one desperate lunge, received a back-stroke which threw him off his balance, and at the same time attempted to grapple with his enemy. Down he went, and down went Perote, and there was the Italian hanging on to the rope by his feet and the Frenchman holding on to it by both hands, when the latter, with a face of triumph, cried : "Look, ladies and gentlemen, at the straps attached to his shoe-heels and passed over the rope ! There is how he has made himself safe, and dared to pretend he surpassed me, whose life was spent on the rope, and whose great-great-grandfather performed before Henry IV." By this time the spectators had rushed with ladders and feather-beds and got both men safely down. Sarfuico's exposure, however, prevented his further success, and he quickly disappeared from the city.

109. Which published book has the greatest number of publishing firms on its title-page?

"Elegant Extracts," a book which in our grandfathers' days was regarded as one of those works that no gentleman's library should be without, and which, with its sententious introduction and its arbitrary division of literature into "moral," "classical," "didactic," "sentimental," etc., has afforded material for the derision of latter-day writers. The edition, in three bulky volumes, of "Elegant Extracts," issued in 1822–24, bears on the title-pages the names of no fewer than fifty-five publishing firms (the list varies in the several volumes, but not in any way worthy of particular notice), and among them are Messrs. C. and J. Rivington, Longman and Co., Hatchard and Son, Whittaker, and Simpkin and Marshall. The report on the scientific results of the voyage of Her Majesty's ship *Challenger*, published by order of Her Majesty's Government, and printed for Her Majesty's Stationery Office, has on its title-page the names of twelve publishing firms. It consists of forty-eight volumes; the utmost extent to which the Government will bear the expense. The first forty-seven volumes weigh over 400lb., and contain 27,650 pages of letterpress; 2,662 lithographic and chromo-lithographic plates; 413 maps, charts, diagrams, and numerous woodcuts.

110. Has a navigable river in this country ever been put up for sale by auction?

This was the case in April, 1892, when, on the 5th of that month, at the City of London Auction Mart, Tokenhouse Yard, what was described as an important and valuable pro-

perty, the whole of the River Ouse navigation, with all the rights of levying tolls as authorized by Acts of Parliament, was put up for public sale before a large attendance. The improvement of the navigation of this historic river, with the right of levying tolls from St. Ives, in Huntingdonshire, to the county town of Bedford, a distance of about thirty-one miles, is authorized by statute, some of the Acts of Parliament extending so far back as 1663. The biddings began with an offer of £2,500 and closed at £5,200; but the auctioneer, on behalf of the vendors, withdrew the property, which was bought in for £6,000.

111. What is the hardest substance stitched through by a sewing-machine?

According to the Chicago 'Journal of Commerce,' a sewing-machine has been invented which stitches easily and rapidly through layers of leather five-eighths of an inch in thickness, this having been accomplished on a first exhibitory trial; in a second trial, stitches were made evenly and rapidly through a piece of bird's-eye maple three-eighths of an inch thick; and in a third test, the still more remarkable feat was achieved, namely, that of stitching through a layer of brass one-eighth of an inch thick placed between pieces of leather. A remarkable resistance was overcome by a Singer machine, which weighed 1 ton 15cwt. It succeeded in sewing driving-belts consisting of twenty layers of hard cotton canvas with coatings of cement between the layers, and carried two needles, so as to make two rows of stitching simultaneously.' That was not the largest machine ever made by the Singer Manufacturing Company, one machine, specially constructed for wide belting, but somewhat thinner than that just referred to, weighing no less than four tons. The number of machines in use throughout the world is about eight millions—Germany produces 50,000 yearly. The total annual output has been estimated at two and a half millions, sufficient to supply one to every three hundred of the population of the globe.

112. Where is the biggest aquarium in the world?

"The three largest aquariums in the world are those at Brighton, Hamburg, and Paris. The Brighton Aquarium, which takes the lead, has forty-one tanks, containing all varieties of fish, from the stickleback to the sturgeon. Its area is 715ft. in length by 100ft. in breadth. Some of the tanks are of vast capacity. There is one in particular, which contains 110,000 gallons of water, and has a plate-glass front,

through which the habits of very large fish may be studied. The Hamburg Aquarium is nearly the same size as that at Brighton. The Paris Aquarium, belonging to the French Acclimatisation Society, in the Bois de Boulogne, is fifty yards in length by about twelve in breadth, and contains forty tanks. Castle Garden, New York, is about to be transformed into an aquarium, which is to have 150 tanks for smaller fish, while there are to be gigantic pool or pond tanks for sharks and other large and dangerous fish.

113. How many pairs of gloves are used in this country every year?

Between thirty-six and thirty-seven million pairs of gloves, or, as nearly as possible, a pair of gloves per head of population annually; which means a very considerable number of pairs amongst the glove-wearing population of the kingdom. More than half the gloves used in the United Kingdom are imported; the number of pairs and value of imported gloves in the years 1860 and 1890 being as follows:—

	Pairs.	Value.
1860	5,318,397	£576,354
1890	19,541,772	1,749,739

Worcester is the most important centre of the British glove trade, and there many of the principal firms of glove-makers have large manufactories, but many women look to "gloving" for a livelihood in Hertfordshire, Oxfordshire, Gloucestershire, Devonshire, Somersetshire, and Dorsetshire. The largest glove manufacturing firm in Great Britain is Messrs. Dent and Co., who give employment to over 15,000 persons.

114. What is the highest price ever paid for a cricket bat?

The highest-priced bat was made for presentation to the late Duke of Clarence. It was of walnut, mounted with silver and highly ornamented, and cost between forty and fifty guineas. The prices of the best playing bats range from twenty-one to twenty-five shillings, but prices from 50 to 100 per cent. higher are frequently paid to professionals for such bats with which they have made good scores. All first quality English bats are made of the best willow wood to be found in this country, no other wood having the requisite lightness and toughness. The wood must be well seasoned, and it is not uncommon for a large maker to purchase two thousand pounds' worth of willow at one time to be kept for a few years before being used, so that it may be thoroughly well seasoned.

115. Who is the best paid University professor in this country?

The best paid University professor in the United Kingdom is Alexander Crum Brown, M.D., Professor of Chemistry in the University of Edinburgh, receiving from Government stipend, college allowance, and fees paid by students, £3,450 a year; and at the same University Sir William Turner, M.B., Professor of Anatomy, receives from the same sources £3,000; William Rutherford, M.D., Professor of Medicine, £2,581; James Cossar Ewart, M.D., Professor of Natural History, £2,409; William Smith Greenfield, M.D., Professor of Pathology, £2,351; Thomas R. Fraser, M.D., Professor of Materia Medica, £2,235; Isaac Bayley Balfour, Professor of Botany, £2,189; and at Glasgow University, John Cleland, M.D., LL.D., Professor of Anatomy, receives from these various sources £2,223 a year. Not only do these professors receive high emoluments, but they are entitled to pensions, estimated not upon the basis of their salaries, but upon that of their total emoluments, which include the fees they receive from the students, an indeterminate amount, which might run up from year to year. The total payments to Fellows and professors at the Universities of Oxford, Cambridge, and Dublin, with their average yearly salaries, are as follows:—

	Number of Fellows and Professors.	Salaries.	Average.
Oxford	424	£159,000	£373
Cambridge	483	132,000	274
Trinity, Dublin	59	31,000	530

116. Where is the largest bishop's diocese in the world?

That of the Falkland Islands, over which the Right Rev. Waite Hockin Stirling has been appointed bishop. The Falkland Islands themselves cover an area of only 7,600 square miles; but the bishop has spiritual superintendence over all the clergy and congregations of the Church of England in South America, except British Guiana, which covers 120,000 square miles. The Falkland Islands diocese extends over 7,291,097 square miles on the mainland, or, in all, over 7,298,697 square miles. The Church of England bishopric of Mackenzie River, in North America, has an area of 600,000 square miles—nearly five times as large as the whole of Great Britain and Ireland, which is 121,115 square miles. But the population numbers only 5,000; the Church of England population, 1,000. The Missionary-Bishop of Mid-China, of the Church of England, has a population of 100 millions; its Missionary-Bishop of North-China, a population of 70 millions, in an area of 498,433 square miles. In the North-West Territory of

Canada the diocese of the Bishop of Saskatchewan and Calgary has an area of 300,000 square miles, or more than double the area of this country. The diocese of Saskatchewan and Calgary extends over 1,000 miles, from Lake Winnipeg on the east to the Rocky Mountains on the west. The diocese of St. David's is the largest in England and Wales, and includes the entire counties of Brecon, Cardigan, Carmarthen, Pembroke and Radnor, with part of Glamorgan.

117. Where is there a newspaper published entirely in verse?

In the State of Kansas, in the United States of America, the 'Williston Journal' has a lady editor, Mrs. Elizabeth Wilson, who writes all her editorials in rhyme. Some of the American papers employ "poets" on thé advertising staff. The "poet" will turn off at a few minutes' notice a "sonnet" on a corset, or a ballad on a new blacking for boots. A dollar a line is often paid for a clever advertisement in this style. Probably the most extraordinary journal in the world is published weekly at Athens, under the editorship of Georg Souris. It is entirely written in verse, even the advertisements being cast in the poetic form; and it is so popular, withal, as to remove Greece from the category of places where this sort of thing is a drug in the market. Nor is it mere doggerel, but verse which is always artistic, and which is often powerful. Several correspondents have sent us copies of this newspaper curiosity. It consists of four pages of double columns (size, 10in. by 8in.), and now and then is illustrated by comic woodcuts.

118. Which Board school in the United Kingdom has the greatest number of scholars?

The South Hornsey Board School, which, according to the Report of the Committee of Council on Education, has accommodation for 2,532 scholars, is the largest Board school in the United Kingdom. The Abbey School, West Ham, has an average attendance of 1,743, and earns a Government grant amounting to £1,590 11s. 6d. for the year. Next comes the Ben Jonson Board School, Harford Street, Stepney, East London, which was formerly the largest. It has now an average attendance of 1,688, with accommodation for 2,075, and received as its annual grant £1,572 14s. 6d. Page Green School, Tottenham, Middlesex, has an average attendance of 1,681, though having accommodation for only 1,656, and received as its annual grant £1,699 7s. The largest denominational school is the Jewish

Free School, Bell Lane, Spitalfields, with an average attendance which exceeds that of any school assisted by Parliamentary grant — 3,126 — with accommodation for 4,177. The school receiving a grant which is next to this in size belongs to the Elswick Works, at Newcastle-on-Tyne, with an average attendance of 2,297, and accommodation for 2,759, obtaining a grant of £2,102 0s. 2d.

119. Has a vessel ever been built of aluminium?

A steam launch built of aluminium was constructed by Messrs. Escher, Wyss, and Co., of Zurich. The exterior of the vessel, which is 20ft. long by 5ft. wide, is for the most part polished, and the consequent smoothness gives the craft a considerably greater speed than could be obtained from a steel or wooden launch of the same dimensions and engine-power. The vessel is built entirely of aluminium, even to the engines and screw propeller, and is the first vessel that has been built of the light, ductile, silver-white "metal of the future." The launch is driven by a two horse-power naphtha motor. The utilization of this metal has rendered the vessel at least 25 per cent. lighter than an ordinary launch of the same size would be. Another vessel, a sailing yacht, with a length of 32ft. and 8ft. beam, has been contracted for with a Leith builder, to be constructed of the same metal. The largest aluminium works in the United Kingdom are at Battersea, where it is produced by a certain process from cryolite and sodium—the former mineral being brought from Greenland, where it is to be obtained in inexhaustible quantities.

120. What is a "sun pillar"?

An instance of this rare and beautiful phenomenon, known as a sun pillar, was seen by Miss Annie Lea, of Lutterworth, on the 5th of March, 1892, just as the sun was sinking behind a thick layer of stratus cloud. A bank of "dust haze" formed a background to the clouds. When the appearance was first seen, about three-fourths of the solar disc was below the edge of the cloud bank. From the upper part of the disc rose a vertical column of light, resembling an inverted obelisk: the tip resting on the rim of the sun. The column was about five degrees high, and its upper end was lost in the clouds. It was orange red in colour below, and yellowish white above. The display lasted for some minutes after the sun sank, but gradually faded away. The pillar is sometimes seen in the morning above the rising sun, and occasionally the conical end is uppermost. The phenomenon has never been satis-

factorily explained. It has been suggested that its resemblance to an Egyptian obelisk may be other than accidental. The City of On, or Heliopolis, where these obelisks were so numerous, was devoted to the worship of the sun.

121. Has a woman ever been elected a bank director?

At the annual meeting in 1891 of the First National Bank of Aurora, in the State of New York, Miss Emily Howland, of Sherwood, was elected a member of the board of directors. The controller said that he "knew of no objection to a woman serving as a director if qualified." Miss Howland, sister of the Hon. William Howland, is a woman of wealth and intelligence, has travelled extensively, and has always managed her own business affairs. Mrs. Louise B. Stephens succeeded her husband as director in the First National Bank of Marion, Iowa. The oldest banker in the United States is a female—Mrs. Deborah Powers, senior partner in the bank of D. Powers and Son, Lansingburgh.

122. Which member of the present Parliament has taken part in the greatest number of contested elections?

Sir Francis Sharp Powell, Bart., of Horton Old Hall, Bradford, and Cambridge Square, Hyde Park, London, member for Wigan. He has taken part in sixteen contested elections, having fought eight successfully and eight unsuccessfully. The sixteen contested elections were as follows:—

Unsuccessful.		Successful.	
Wigan	1852	Wigan	1857
Wigan	1854	Cambridge	1863
Wigan	1859	Cambridge	1865
Cambridge	1868	Yorkshire (N.-W. Riding)	1872
Stalybridge	1871	Wigan	1881
Yorkshire (N.-W. Riding)	1874	Wigan	1885
Manchester	1876	Wigan	1886
Yorkshire (N.-W. Riding)	1880	Wigan	1892

Having been elected for Wigan in 1881, Sir F. S. Powell was unseated on petition.

123. Which marksman in a shooting competition has scored the greatest number of consecutive bull's-eyes?

Captain Fremantle and Lieutenant Oxley, in 1891, at Bisley, while shooting for England in the Elcho Challenge Shield Competition, each scored fifteen consecutive bull's-eyes. Mr. Love, firing for Scotland in the same shooting competition,

also scored fifteen consecutive bull's-eyes; while Captains Foulkes and Gibbs each scored fourteen. A remarkable shooting feat was that of Private R. McVittie, of the Dumfriesshire Rifles, in August, 1885, with a Martini rifle. He scored six bull's-eyes out of seven shots at 200 yards; seven bull's-eyes at 500 yards; six bull's-eyes out of seven shots at 600 yards; his score being: 34, 35, and 33, or, in all, 102, out of a possible 105.

124. What is the most peculiar insurance ever effected at Lloyd's?

Against twins, one such risk at least being recorded as having been taken. Insurances by Lloyd's underwriters are of the most miscellaneous description, and in addition to the one against twins have included risks from loss of securities carried through the streets, insanity, adverse wills, and disappointed expectations generally. In fact, it has been stated that a policy to cover any risk, however extraordinary or exceptional, could be readily effected at Lloyd's. Lloyd's underwriters deposit £5,000 (as a guarantee of solvency) with the committee, who have thought it necessary to remind the public that only marine and incidental transit risks are backed by that guarantee; the committee, while not forbidding other risks, declining to recognise them. The total securities placed by way of guarantee at the disposal of Lloyd's Committee amount to about four millions sterling, while the amount insured is about four hundred millions.

125. What is the size of the largest cockle shell ever found?

At Kenmare Castle there is an enormous cockle shell weighing 120lb., brought from the South Sea Islands, and moulded into a most fantastic form, exquisitely elaborated by the inanimate hand of Nature. It is, or perhaps more correctly speaking was, in the olden days of baronial hospitality, used as a punch-bowl. When this gigantic natural bowl, filled with its ocean of choicest punch, was placed on the oaken table in the vaulted hall of the castle, it is recorded that the effect was highly pleasing, and added speedily to the joyous festivity of the assembled company. The shells of the bivalve *Tridachna gigas*, however, are even larger still, some being found measuring a yard and a half in length, and weighing 500lb. Magnificent examples of these last-named shells may be seen in the Church of St. Sulpice, Paris, where they hold the holy water. They were the gift of the Venetian Republic to Francis I.

126. Which of the existing county cricket clubs has reached the greatest age?

The oldest of existing county clubs is the Surrey (Kennington Oval), founded in 1844, which has thus reached fifty years of age. Derbyshire began in 1845. Sussex dates from 1857 (having been conducted by a committee from 1842); Kent, though often appearing as a county, and from 1842 to 1854 playing an England eleven during the Canterbury Week, dates its county club from 1859 (reformed in 1879); Notts, 1859; Yorkshire, 1863; Lancashire, 1864; Middlesex, 1868; and Gloucestershire in 1870. In June, 1873, rules were passed respecting the qualification of county players, and, since then, county cricket has made considerable progress in this country. The following is a list of the English county cricket clubs now existing:—

Bucks	Kent	Notts
Cheshire	Lancashire	Oxfordshire
Derbyshire	Leicestershire	Staffordshire
Durham	Lincolnshire	Surrey
Essex	Middlesex	Sussex
Gloucestershire	Norfolk	Warwickshire
Hampshire	Northamptonshire	Worcestershire
Hertfordshire	Northumberland	Yorkshire

127. Is there any instance of a river flowing inland?

A remarkable instance of this kind is found in Africa. Near the shores of the Gulf of Aden is a small body of salt water, Lake Assal, occupying a basin whose flow is several hundred feet below sea level. The surface of the lake itself is nearly 700ft. below mean tide, and it is fed by a river or stream some twenty or more miles in length flowing inland from the ocean. It is highly probable that the whole basin which the lake partly fills was once an arm of the sea, which became separated therefrom by the drifting sands. The inflowing river has a limited volume, and has filled the basin to the extent that the evaporation and supply exactly balance each other. At Adelsberg, in Carniola, twenty-two miles north-east of Trieste, is a famous grotto, which is divided into two parts—the old grotto and the new. The old grotto is 858ft. in length, while the new extends to 8,550ft. The River Poik flows inland, in part of the grotto, and disappears below the ground.

128. Can ships attain greater speed in deep or shallow water?

Mr. White, Director of Naval Construction, in an address upon this subject, stated that shallowness of water exercised a retarding effect on ships. The *Edgar*, in Stokes Bay, with

12 fathoms of water, required 13,260 horse-power to attain 20½ knots. In water 30 fathoms deep, between Plymouth and Falmouth, she reached practically 21 knots with 12,550 horse-power. This represented a loss of about ¾-knot speed due to shallowness of water. In the trials of *Latona* at Stokes Bay, and of *Terpsichore* at Skelmorlie, it appeared that the greater depth of water gave an advantage of about $\frac{4}{10}$ths of a knot in speed, or about 600 horse-power. Referring to an eight-hours' trial of the *Blenheim* when running from the Nore to Portsmouth, the vessel in the first hour was traversing most of the time water about nine fathoms in depth. The engines made about 92½ revolutions, and the speed was barely 20 knots, with 15,750 horse-power. During the fifth and sixth hours the horse-power was practically the same as in the first hour. The ship was running in water from 22 to 36 fathoms in depth, the revolutions were about 96½, and the speed was 21⅓ knots. With no change, except depth of water, the speed rose 1⅓ knots, and shallowness involved an expenditure of power at 20 knots which probably reached 3,000 horse-power above what would suffice in deep water.

129. Where is the largest watch manufactory in the world?

This establishment is located at Elgin, Kane County, Illinois, U.S., and known as the National Watch Company. It was founded in 1865 by a number of men who had formerly been connected with the Waltham Watch Company at Massachusetts, who succeeded in interesting Chicago capitalists in their enterprise, and, after securing substantial concessions from Elgin, in the way of land and stock subscriptions, began the building of a factory on the Fox River. From a modest beginning the Elgin National Watch Company has become the largest watch manufactory in the world, with a plant valued at twenty million dollars. In 1885, the stockholders of the company refused an offer of thirteen million dollars from an English syndicate. The giant factory turns out 2,500 finished watches every day.

130. Which engine on an English railway can draw the heaviest load?

A Great Western engine drew a train of 101 waggons averaging not less than ten tons each, or upwards of 1,000 tons, over the Ferndale branch of the Taff Vale Railway, and the first train on the opening of the Barry Docks contained the like number of waggons and weight, which were drawn over the Rhondda branch of the same railway. Great Northern

engines frequently draw trains of 700 tons, or, including weight of engine and tender, 750 tons. The goods locomotive engines of the London and North-Western Railway range from 1,000 to 1,200 horse-power. They cost for building, tender included, from £2,500 to £3,000, and last fifteen to thirty-five years, during which period they cover from 200,000 to 500,000 miles. In the formation of a locomotive 5,416 pieces have to be put together as accurately as the parts of a watch. The part which is exposed to most wear and tear is the crank piece, which has been estimated to stand for 60,000 miles. The driving-wheels are supposed to last long enough to travel 66,733 miles. The largest locomotive yet made is one in use on the Gothard Railway. It weighs 85 tons, has six axles and two driving groups. Another large one has been made in the United States. It weighs 100,000lb., and is from 1,400 to 1,500 horse-power. At a meeting of the Statistical Society, the average weight of a passenger train on the principal railways of this country was stated to be 150 tons. The average weight of goods and coal trains is more than three times as much, or between 400 and 500 tons.'

131. Which theatre in this country has the biggest orchestra?

The Empire Palace, Leicester Square, London, which has a permanent orchestra of fifty performers, every one of whom is a musician of exceptional ability. When opera is performed at Drury Lane and Covent Garden, the orchestra numbers from sixty-five to seventy-five. The Alhambra, in Leicester Square, London, has the following, under the musical direction of Mr. G. Jacobi : Nine first violins, five second violins, three violas, four 'cellos, four double basses, two flutes, one oboe, two clarinettes, one fagotto, three cornets, two horns, three trombones, one euphonium, one side drum (tympani), one bass drum—forty-two performers. On special occasions a harp is added, and sometimes a brass band on the stage. At the Palace of Varieties, Manchester, the orchestra, during ballet performance, numbers fifty, while during ordinary business it numbers forty.

132. What is the cost of the most expensive sewing machine ever made?

One of the wedding presents of Miss Willing, of New York, on her marriage to Mr. Astor, was the gift of a sewing machine by her grandmother. The works of the machine were of the ordinary construction and material, Singer's oscillating pattern, but richly silver-plated. The frame was specially constructed

of hammered iron, highly ornamented and gold-plated. The table was made of a special slab of beautifully marked marble, which was inlaid with ornamental stones and crystals in a floral pattern, with the monogram of the newly-married couple surrounded by a wreath of roses, also in mosaic. The cabinet and drawers were of ebony, richly inlaid with floral patterns in silver, gold, ivory, and mother-of-pearl. It is stated to have cost £600.

133. Where is the biggest boys' band in the world?

At Kneller Hall, situated midway between Hounslow and Twickenham, about ten miles from London, which was opened as a military school of music on March 3rd, 1857. The boy-students vary in number, ranging from 150 to upwards of 200. There is no other boys' band as large as this one, which has played 150 and 200 strong. The school turns out about 80 bandsmen every year, thoroughly equipped for taking a place in the ranks of the Army bands. Colonel Shaw Hellier is the commandant. The Duke of York's School, Chelsea, generally has about 120 boys in the band, exclusive of learners, able to perform ordinary music in a creditable manner. They are all the orphan sons of soldiers, and eventually join the Army. This boys' band is organized in the same way as a regimental one, having its master, sergeants, corporals, drum-major, etc. Their instruments are made in a reduced size, and the boys wear distinctive clothing. The Royal Hibernian School, Phœnix Park, Dublin—also for the education and training of the orphan sons of soldiers—has a large band of boys, numbering from 80 to 100. The largest adult military band is that of the Belgian Guides, 100; Sapeurs Pompiers of France, the same; Royal Artillery, 80; bands of Royal Marines, three separate ones, each of 60. The bands of the Guards number from 30 to 45.

134. What is the longest journey ever made on a tight-rope?

That made by Charles Blondin (Jean François de Gravelet) over the Falls of Niagara, the distance being 400 yards. The first journey across was made on the 30th of June, 1859, and he continued the journeys during that and the following year. The rope was about three inches in thickness, made entirely of hemp, and its adjustment in place was, in its way, an engineering feat. The rope cost over £1,000, and remained in position for nearly two years. Special trains were run on the railroads, including the New York Central and the Great Western and Grand Trunk of Canada, while enormous stands

on either side of the Falls were crammed with people. Blondin continued giving exhibitions until 1860, when he crossed over on stilts before the Prince of Wales, then making a tour through America and Canada. He was (before the days of instantaneous photography) photographed while standing still in the centre of the rope. He walked across enveloped in a sack made of blankets, wheeled a barrow across, turned somersaults, cooked a dinner, and carried a man over on his back. Blondin, who is the champion tight-rope performer of the world, though by birth a Frenchman, now lives at Niagara House, South Ealing, in his adopted country. On the rope, Blondin says he feels as safe as if walking along an ordinary street. The rope he performed on at the Crystal Palace was 170ft. high and 249yds. in length. Since his famous exploit across Niagara, he has made more than 4,000 journeys along the rope in various parts of the world.

135. How can totally obliterated inscriptions on coins be read?

This is usually done by placing the coin to be deciphered on red-hot iron, an ordinary poker being frequently used for the purpose. The parts where the letters of the inscription had existed oxidate at a different rate from the surrounding parts, so that the letters exhibit their shape, and become legible in consequence of the film of oxide which covers them having a different thickness, and, therefore, reflecting a different colour from that of the adjacent parts. This method is practised at the Mint to discover the genuine coins when silver is called in. The inscription, which appears of a greenish hue when the coin is heated, disappears as the coin cools.

136. Which are the best flowers for a sick room?

For a sick room growing flowers are the best, but cut flowers are more often obtainable. As to these latter, they should first of all be fresh. They quickly decay, and then they communicate to the water in which they are placed vegetable juices, which undergo putrefactive fermentation and render the air impure. Bright-coloured flowers are desirable. Florence S. Lees, in her "Handbook for Hospital Sisters," edited by Sir Henry Acland, says: "The effect in sickness of beautiful objects, of variety of objects, and especially of brilliancy of colour, is hardly at all appreciated. I shall never forget the rapture of fever patients over a bunch of bright-coloured flowers." She says: "Strong-smelling flowers should be avoided." Sweet peas, lilac, cloves, that is, clove-pinks, or clove-gilly-flowers—so called from their aromatic smell resembling the

spice of that name—all these should never be in a sick room. Familiar flowers, from their associations, may have a specially good effect. According to the 'Pharmaceutical Journal' of Australia, the practice has been adopted, on the recommendation of Baron von Mueller, of placing green branches of eucalyptus in sick rooms as a disinfectant. If the branches be placed under the bed, the bedding undergoes thorough disinfection, the volatile vapour penetrating and saturating the mattress, and acting not only as an antiseptic, but also as a sedative.

137. Where is the oldest rose-bush in the world?

Just outside the crypt of the cathedral in the ancient city of Hildesheim, in Hanover, is to be seen the oldest rose-bush in the world. It is said to have been planted by the Emperor Louis the Pious in the beginning of the ninth century, when the episcopal see, founded by his father, Charlemagne—or, more correctly, Charles the Great—was for the time removed to Elze. The documents proving this fact were destroyed by a fire in the cathedral at Hildesheim in 1013, but later records show that Bishop Hezilo, who rebuilt the cathedral, inclosed the roots of this rose-tree within a vault, which still exists, raised the crypt upon this vault in 1061, and spread out the branches of the rose-tree upon the walls. In 1849 the stem was 26⅛ft. high, and the branches covered about 32ft. of the external walls of the crypt. A few years ago it was feared that after its life of a thousand years the tree was losing its vitality, but within the last year or two it has put forth several new shoots, showing that the oldest rose-tree in the world is still possessed of vigorous life. Some very prolific rose-trees are on record; one in Holland, belonging to Madame Regnew, gives a crop of 6,000 at a time; another at Whitby, of the Marshal Niel variety, produced 3,500 at one picking.

138. What was the most expensive programme ever printed?

That presented to Her Majesty in June, 1854, when she, with the Prince Consort, opened the Crystal Palace at Sydenham. Programmes on special occasions of this kind are most elaborately got up and ornamented, and are usually printed on satin. Their cost ranges from a sovereign to as high as forty or fifty pounds. One of the latest novelties in ball programmes consists of a neat thin cardboard band, 1½in. in width, edged with gold, which encircles the wrist like a bracelet, and is easily closed and unclosed by means of the thin silken cord which

suspends the pencil. "Dances" is inscribed on the overlapping flap, the date and residence below, and the dances in rotation all round, with space left for the gentleman to write his name or initials.

139. In which part of the world is conversation carried on by whistling?

A French traveller, M. Lajard, has written a work on the whistling language, which some time ago occupied the attention of the Paris Academy of Sciences. It is in the Canary Islands that people whistle instead of speaking when they hold converse with each other. The whistling language is not a mere language of conventional sounds. It is composed of words as it were, like any other language, and the inhabitants of the Canary Islands attain great proficiency in it, so that they can converse on all sorts of subjects. The whistling noise is produced by placing two fingers inside the mouth. M. Lajard declares that the language has a great affinity with Spanish, being in fact a sort of whistling Spanish. He has jotted some of it down in a sort of musical notation, and it is found that any sentence has exactly one syllable more than the equivalent sentence in Spanish, the extra sound being accounted for by the fact that the first syllable serves as a mere exclamation designed to attract the attention of the person addressed. M. Lajard learnt enough of the language to converse to a certain extent with the natives. According to a German officer—Lieutenant Quedenfeldt—who resided for a considerable period on the island, natives of Gomera can by their whistling language carry on a long and complicated conversation with a neighbour a mile off.

140. What is the highest price ever paid for an ivory ornament?

The following extraordinary high prices have been at various times obtained for ornamental articles made in ivory: 58,000 florins (equivalent to about £4,835), for the ivory armchair presented by the City of Lubeck to Gustavus Vasa, and purchased by the Swedish Chamberlain; 160 guineas, given by Burdeley, for an old Italian casket of ivory, with fluted columns at the angles, and chased silver mountings, on the dispersal of the Wertheimer collection; £147, by Goldshmidt, of Frankfort, for an ivory comb of the fifteenth century (Magniac sale), carved on each side with subjects illustrating the life of Christ; 110 guineas, at Christie's Rooms, for an ivory revolving chair once belonging to Tippoo Saib; £78 15s., at the Magniac sale, for an ivory cup, 2¾in. high, elaborately carved. M. A. Lenoir, founder

of the French Museum, stated that during the transport of the remains of Abelard and Heloise to the Petits Augustins, an Englishman offered 100,000 francs (£4,000) for one of the teeth (ivories) of Heloise. Dieppe, in France, is the most noted place, at the present day, for ivory carving. They produce most exquisite articles of almost every description, including statuettes and crucifixes. The demand for the latter, many of which are worth between £30 and £40, is so great that ten or twelve workmen are employed all the year round in carving crucifixes alone.

141. Which is the oldest public school in this country?

Winchester College, which, on the Domum Day of 1893, that is to say, upon the Tuesday nearest to the 1st of August in that year, celebrated the 500th anniversary of the day upon which the college was founded, and kept at the same time the 500th anniversary of the English system of public schools. The date of the celebration was fixed for sake of convenience, because the 26th of March is called the *prima fundatio;* and John Morys, who was actually appointed to office two days later, was called *primus custos istius collegii* upon the brass to his memory which Dr. Freshfield caused to be placed in the College Chapel. The foundations of the other public schools date as follows :—

Eton	1440	Merchant Taylors'	1561
St. Paul's	1512	Rugby	1567
Shrewsbury	1551	Harrow	1571
Westminster	1560	Charterhouse	1611

142. Where is the most minute writing on glass to be seen?

In the Army Medical Museum at Washington, in the United States, executed by Mr. Webb, a maker of Noshert's test-plates for lenses. This specimen of microscopic writing on glass consisted of the Lord's Prayer on a rectangular space $\frac{1}{294}$ by $\frac{1}{441}$ of an inch, or an area of $\frac{1}{129654}$ of a square inch. There are 227 letters in the Prayer, therefore in a square inch there would be room for 29,431,458 letters, or the entire Bible, Old and New Testament, eight times over, as the Bible contains 3,566,480 letters. At the rooms of the Royal Microscopical Society, King's College, there is a contrivance, which enables the user to write with marvellous minuteness. The mechanism consists of a series of levers supported by four brass rods, and into the centre of these levers a pencil is screwed which points to a sheet of paper placed on a glass table. Above this is a diamond point

touching a sheet of glass, which transmits to it in a reduced form any writing done with the pencil. The writing on the glass is quite invisible to the naked eye, but a strong microscope will show the Lord's Prayer, written legibly, within the compass of $\frac{1}{10000}$ part of a square inch. A gentleman who has made a special study of this ingenious machine succeeded in writing the entire Bible within the space of a square inch—a feat which really appears quite impossible.

143. Where, in this country, is the largest open-air concert held every year?

In Wales on the occasion of the Eisteddfod, or annual Welsh bardic congress. In 1891 it was held at Swansea, and was witnessed by between twenty and thirty thousand people. Prizes are offered for instrumentalists on harp, piano, etc.; and also for solos, quartette, and choir singing, which are very numerously competed for. Twenty-four parties entered for one of the quartette competitions, and there are always a large number of entries for the great choral competition, which is one of the most attractive features of this congress of musicians. The chief prize at Swansea was £200, with a bâton valued at £70. Another very large open-air concert is that given annually on the garrison recreation grounds at Portsmouth by the massed bands of the garrison, with no fewer than 150 performers, and frequently a larger number. The Tannahill concerts, which used to be held on the Braes of Gleniffer, near Paisley, every year, attracted greater crowds than any other open-air concerts ever held in Scotland.

144. Which bird has the greatest number of colours in its plumage?

The birds of paradise are noted both for the elegance of their figure and the beauty and variety of their colouring, the king bird of paradise (*Cincinnurus regius*) appearing to have almost every colour of the rainbow. The male of this species is of a ruby red upon the upper portions of the body; the brow and top of the head are orange, the throat yellow, and the belly greyish white; the eyes are surmounted by a small black spot, and a band of metallic green divides the dark-coloured breast from the shades upon the belly; the feathers upon the sides are grey, marked with irregular white and red lines, and terminate in a bright emerald green tip. The female is reddish brown upon the upper part of the body, and below of a reddish yellow streaked with brown; the wings are gold colour, beak dark brown, and feet light blue. This species is found over a larger extent of country than any other member of its family,

occupying not only a large portion of North Guinea, but most of the surrounding islands, where it frequents the bushes growing upon the sea-coast. Its movements are extremely restless, and like all birds of paradise revels in its own beauty, as it spreads its plumage and raises the golden collar round its throat.

145. Why are clergymen called reverend?

Because of their being worthy or deserving of reverence as ministers of God, their lives being devoted to His service and the sacred matters of religion. The title is given because of the office they hold, and not of the individual filling it. This is shown by the distinctions given to the several offices in the Church of England; a dean being addressed as very reverend, a bishop as right reverend, and an archbishop as most reverend. In Scotland the principals of the Universities, if clergymen, and the moderator of the General Assembly are styled very reverend, and each of the ministers reverend. The Nonconformist ministers in the British Empire and the United States have the same title, although some ministers in this country disclaim it. In 1874, the Bishop of Lincoln refused to allow "Rev." to be put on the tombstone of a Wesleyan preacher, and gained his cause in the Court of Arches, in 1875, but the Privy Council on appeal (January, 1876) reversed the decision, and declared the title to be simply complimentary, and not confined to clergymen of the English Establishment.

146. Which fish is most difficult to keep alive in an aquarium?

Singular as it may appear, the common herring is a fish which it is most difficult to procure and preserve alive, it being so delicate that the loss of even a few scales is sure to cause its death. For several years Dr. Hermes, of the Berlin Aquarium, has vainly tried to obtain some specimens; they had either been rubbed in the net or been touched with the hand, and died before reaching Berlin. Some time ago he succeeded in obtaining a live one, one of his men having grown sufficiently expert to catch it in a sort of glass balloon lowered with the net. No aquatic animal is so difficult to keep alive in an aquarium as the whale. A living whale, 9ft. 6in. long, was brought from Labrador, in North America, and placed in the Royal Aquarium at Westminster, September 26th, 1877, but three days afterwards, on the 29th, it died. A beluga, or white whale, a sort which is not found longer than from 12ft. to 15ft., and therefore seemed as suitable as any could be, arrived at the Westminster

Aquarium on May 28th, 1878, but it died in the latter part of the following month. In fresh-water aquaria, to keep fish alive it is desirable to have some of the mollusca placed in them. The most useful of these is the trumpet snail. Water-beetles are often placed in aquaria, and the great black hydrophilus is harmless.

147. What is the highest salary ever paid to a public dancer?

Six thousand pounds per annum, which was paid to Miss Lottie Collins, of "Ta-ra-ra-Boom-de-ay" fame. Between ninety-five and one hundred pounds a week was paid to Mlle. Vanoni whilst appearing at the London Alhambra. The "star" dancers at the Paris Opera receive from 25,000 to 30,000 francs (£1,000 to £1,200) a year. The leading dancers in London receive from £20 to £25 a week, though Sir Augustus Harris has paid as much as £30 weekly for his principal dancer in a Drury Lane pantomime. Marie Taglioni, who was the most celebrated dancer of this century, had a six years' engagement at £1,200 a year, and, says M. Veron, "refused an increase of salary which I offered," saying that she had been more than paid by her triumphs. The Princess Victoria Mary of Teck took lessons in dancing from Taglioni, and the Queen on one occasion charged the Princess with the following message to the veteran artiste: "Tell Madame Taglioni from me what great pleasure it gives me to know that you are receiving lessons from such an instructress. Tell her, also, that it was her inimitable grace, which I can never forget, that inspired me with the passionate love of dancing which I possessed in my youth."

148. What is the greatest distance ever travelled on a wedding trip?

That accomplished in the six years' honeymoon travelling of Mr. and Mrs. Sigourney, of California. In 1882 Mr. George Sigourney married Miss Henriques, of Buffalo, who was far from strong, and so her devoted husband determined to try what travel would do for her. On the day of the wedding in May, 1882, a card was sent out to their friends intimating as follows: "Mr. and Mrs. Sigourney at home, at Sacramento, every Thursday from 10th May, 1888." The whole of such intervening years was spent in travel, with a view of re-establishing the lady's health. During that period the married pair visited England, Ireland, Scotland, France, Germany, Italy, Austria, Russia, Greece, Denmark, Turkey, China, Japan, Egypt, Persia, Africa, and South America—beginning with Patagonia,

and finishing at Panama, whence they returned to England to embark for New York. In the midst of all these journeyings Mrs. Sigourney became the mother of four children—twin boys, born at St. Petersburg; a daughter, born in China; and another daughter, born in Brazil. When the 10th of May, 1888, arrived, it found the bride and bridegroom "at home," at Sacramento, to receive their friends, on the conclusion of the lengthiest wedding trip ever made, and both in excellent health. The honeymoon cost £12,000; while the distance travelled in their journeyings equalled, if not exceeded, that of an entire circuit round the world; and if all the excursions at the various places visited be taken into account, the distance would be increased two or three-fold.

149. In which part of the world is there a community of dwarfs?

Several such communities exist in Africa and one in Europe. That in Europe was reported in 1887 by Professor Miguel Marazta, who found a numerous community of diminutive folks in the Valley of Rebas (Gerona), at the end of the Eastern Pyrenees. They are called Nanos (dwarfs), and do not exceed 4ft. in height. Their features are so peculiar that there is no mistaking them among others. All have red hair; the face is as broad as long, with high cheek-bones, strongly developed jaws, and flat nose. The eyes are not horizontal, but somewhat oblique, like those of Tartars and Chinese. A few straggling hairs are found in place of beard. The skin is pale and flabby. The two communities of African dwarfs are the Batwas, averaging only 4ft. 3in. in height; and the tribe called McKabba, near Lake Ngami, who are only 4ft. 1in. in height. Stanley, in his last expedition, discovered a race of dwarfs. He says: "These people are scattered among the Balesse, near to the Mount Pisgah, and are undersized nomads, dwarfs, and pigmies, who live in the uncleared virgin forest, supporting themselves on game, which they are very expert in catching. They vary in height from 3ft. to 4ft. 6in., and a full-grown male adult weighs about 90lb."

150. Which living potentate has the greatest number of wives?

Muley Hassan, Emperor of Morocco, we are told by M. de la Martinière, F.R.G.S., has no fewer than 6,000 wives in each of his three capitals, Morocco, Fez, and Mequinez or Miknas. The King of Ashantee has 3,000 wives; while the King of Dahomey basks in the smiles of 250. Abdul Hamid II., Sultan of Turkey, has 300 wives. From among the inmates

the Sultan designates seven to be "Kadyn," or Ladies of the Palace, the rest being called "Odalik." The maintenance of the Sultan's establishment is expensive, costing thirty million roubles, or nearly three millions sterling yearly. The Shah of Persia is credited with 400 wives, and in Siam the King is said to have a matrimonial following of 600 wives.

151. Which occupation in this country furnishes the greatest number of suicides?

That of soldier far exceeds any other, the figures as given in Mulhall's latest dictionary of statistics for the various occupations per million being as follows :—

	Ages.			Ages.	
	25-45	45-65		25-45	45-65
Soldier	506	2336	Printer	156	458
Beerseller	402	606	Tailor	147	457
Physician	381	639	Shoemaker	203	341
Lawyer	324	562	Miller	68	555
Butcher	243	708	Grocer	160	326
Hairdresser	270	536	Carpenter	122	381
Broker	271	485	Policeman	82	421
Clerk	249	475	Labourer	114	292
Baker	163	632	Mason	90	330
Cabman	193	506	Gardener	98	274
Schoolmaster	156	536	Fisherman	43	367
Farmer	160	473			

This excessive tendency to suicide on the part of soldiers is not limited to this country, as the military profession furnishes much the largest proportion of suicides in all countries, being usually twice or thrice that of any other occupation.

152. Which trade has the most hurtful effect upon the teeth?

Quicksilver miners follow the most unhealthy trade in the world. The fumes of the mercury produce constant salivation, and the system becomes permeated with the metal, the teeth of the unfortunate men drop out, they lose their appetite, become emaciated, and, as a rule, seldom live longer than two years. Chloride of lime, employed by bleachers, frequently destroys the enamel and dentine of the teeth. But phosphorus, used so largely in the manufacture of lucifer matches, affects a very large number of persons, women, girls, and children greatly preponderating. People who work in soda factories are affected by the teeth becoming soft and translucent; they break off close to the gums. Dr. Hesse, of Leipsic, states that bakers are liable to suffer from carious teeth on account of the flour entering the mouth during work, collecting on and around the teeth, where it decomposes and generates an acid destructive to the dentine.

153. Has a human being ever disappeared by means of spontaneous combustion?

In medico-legal works cases are recorded, generally of a somewhat ancient date, in which it was supposed that the body was either spontaneously consumed by inward combustion, or acquired such extraordinary combustible properties as to be consumed when brought into contact with fire. In 1725, at Rheims, the remains of a woman named Millet were found burned in her kitchen. Nothing was left of the body, except some parts of the head, of the legs, and of the vertebræ. Suspicion was excited against the husband; but learned experts reported the case as one of spontaneous combustion. In 1847 the body of a man, aged seventy-one, and who was neither fat nor a drunkard, was found in bed in a state of combustion. Dr. Nasson, who was commissioned to investigate the case, reported that the burning must have resulted from some inherent cause in the person—probably roused into activity by a hot brick which was found at his feet; and Orfila coincided in this opinion. In the same year the Countess of Goerlitz was found burned to death, and the valet, John Stauff, was accused, but escaped on the hypothesis of spontaneous combustion. But afterwards, detected in attempting to poison the Count, her body was exhumed, and, being examined by Liebig and Bischoff, it was proved that she was murdered, and before his execution Stauff confessed that he strangled and then burned her. Liebig distinctly shows that all such cases are unworthy of credence. It may certainly be predicted that, so long as the circulation continues, a human body will not take fire, even if a limb be held in the fire until it be charred. Spontaneous combustion in a living body may be regarded as absolutely impossible.

154. Which bird can live the longest time without water?

The petrels, especially the Fulmar petrel, which rarely strays from the Arctic Ocean, and the storm petrel, which is met with in all parts of the world except very high northern or southern latitudes. These birds may be said to spend their lives upon the sea, returning only to the land for breeding purposes, or after a long continuance of storms. They cannot drink the salt water, and seem to depend, so far as fresh water is concerned, upon the falling rain. Birds of the parrot species, in a state of nature, hardly ever drink, any moisture required to sustain their system being taken with their food, which consists of fruits, nuts, and vegetables. Even in captivity they have been known to abstain from fluids for long periods. An instance is recorded of a parrot living in the Zoological

Gardens, Regent's Park, without drinking for fifty-two years. The ostrich has been known to make long journeys without taking water for months, and it is a common saying among the Arabs that the ostrich "never drinks."

155. What is the size of the smallest known insect?

One-nineteenth of an inch in length, that being the size of the insect called *Pteratomus putnamii*, a parasite of the ichneumon. There are spiders, which, however, are no longer classed as insects, no bigger than a grain of sand, and the webs spun by which are so fine that it takes four thousand of them to equal in magnitude a single hair. Smaller still are some of the minute organisms which exist in putrifying meat. Dr. Dallinger, speaking of these in a lecture at Bristol, said that 2,800 millions of these minute creatures would lie in a space equal to one ten-thousandth of a cubic inch. According to M. Adametz, in 11½oz. of Emmenthal cheese, which is a soft variety of Gruyère, when it is forty-five days old there are, near the surface or circumference, from 3,600 million to 5,600 million living organisms called microbes, or as many as there are people on the earth. A flea is not more than one-eighth of an inch in length, but its jumping powers are a yard; if a lion jumped in the same proportion it ought to clear about one-third of a mile. Professor Lintner asserts that there are a million or more species of insects in the world.

156. Has an empire ever been sold by auction?

This occurred in the case of the Roman empire. On the death of Pertinax in 193, the Prætorian Guards put up the empire for sale by auction, and, after an animated competition between Sulpician and Julian, it was knocked down to the latter for six thousand two hundred and fifty drachmas. The Romans held auctions of various kinds, the proceedings being much the same in all cases. The *auctio sub hasta*, which was a sale of plunder, was held under a spear stuck in the ground. The *magister auctionis*, or auctioneer, was chosen from among the *argentarii*, or money-changers, and his assistants were the cashiers.

157. In what part of the world does a horse appear on the pension list?

In the United States there was a case of this kind in respect of a horse which belonged to Captain Keogh, a near relative of General Custer, and was the only horse which escaped the massacre in which that General was killed. His name is

Comanche, and he was stationed at Fort Riley, Kansas, with the 7th Cavalry, Custer's old regiment. His pension is sufficient to pay for his transportation wherever he goes, and also for his forage. He is cared for by a man who does nothing else. He is saddled, bridled, and equipped, and led out for inspection, yet no one sits in his saddle. He has been much sought after by showmen, but all their offers have been declined. He will be kept as long as life lasts, and after that his skeleton will probably be sent to the Smithsonian Institution. The horse which carried the German Emperor through the Franco-German War is also in receipt of a pension.

158. Have white lobsters ever been found?

An albino or white lobster was recently found in a shipment from New Brunswick to Eastport, Maine. It was twelve inches in length, and was forwarded to Washington to form part of the exhibit of the United States Fish Commission. Another white lobster was captured some time ago at Welchpool, Campobello, New Brunswick. Albinism was thought at one time to be confined to human beings, but this has been found not to be the case, for there are albinos amongst rabbits, crows, and various other species of animals. There are some lobsters whose natural colour is almost or completely white. It is so with the Palinurus, or spiny lobster, found in the Mediterranean, of which there is a fine specimen in the University Museum at Oxford, presented by the Rev. F. W. Hope. It is of a pinkish-white hue, but is quite as white as some Englishman of whom we should say that he had very little colour in his complexion, especially in contrast with the ordinary lobster, which, when unboiled, is as black as a negro. This specimen is about 2ft. long. There is another white lobster in the same museum, which is about a yard long.

159. How many tourists are killed on the Swiss mountains every year?

In the four years ending 1890, the number of tourists killed in the Swiss mountains was as follows :—

1887	20	1889	26
1888	14	1890	33

or an average of twenty-three or twenty-four deaths. Apart from mountaineering, the number of travellers throughout Switzerland approach 1,000,000 per year, and it has been estimated that £3 per head is spent, or a total of nearly £6,000,000. As a sign of prosperity caused by this great influx of visitors, some 1,008 inns have been built in various localities, at a cost of £12,800,000, giving sleeping accommodation to 58,157

persons; 283 of these hotels are placed in elevated positions above 3,400ft.; fourteen are at a height of 6,500ft. above sea level. They give employment to 16,000 persons, and the annual gain to the innkeepers amounts to £528,000.

160. How are the stars counted?

By means of the telescope and photography. The Astronomer-Royal for Ireland, Sir Robert S. Ball, in one of his lectures, mentioned a photograph which had been obtained by Mr. Isaac Roberts representing a small part of the constellation of the Swan. The picture is about as large as the page of a copy-book, and it is so crowded with stars that it would puzzle most people to count them; but they have been counted by a patient person, and the number is about 16,000. Many of these stars are too faint to be ever seen in the greatest of telescopes yet erected. Attempts are now being made to obtain a number of similar photographs which shall cover the whole extent of the heavens. The task is indeed an immense one. Assuming the plates used to be the same size as that above mentioned, it would require at least 10,000 of them to represent the entire sky. The counting of stars by the telescope was first reduced to a system by the Herschels, who introduced "star-gauges," which were simply a calculation by averages. A telescope of 18in. aperture, 20ft. focus, and a magnifying power of 180, giving a field of view 15in. in diameter, was used for the purpose. The process consisted in directing this instrument to a part of the sky and counting the stars in the field. This, repeated hundreds of times, gave a fair idea of the average number of stars in a circle of 15in. diameter in all parts of the sky. From this as a basis it is possible to reckon the number of stars in any known area.

161. Which country issues the highest-priced postage stamp?

Although it is difficult to understand how they are used, except as bank-notes, it appears that Victoria, Australia, issues postage stamps of the highest value, ranging from £1 to £100, in various patterns and colours. The £100 stamp is rectangular in shape, and deep pink in colour. The United States have one for sixty dollars (£12). British South Africa has £10 stamps; South Australia £20. Stamps for £5 are common in many countries, but it is the highest rate issued in Great Britain. Old stamps appear to fetch higher prices than new ones—a complete Cabul issue is priced at £300; Mauritius, 1847, £200; Sandwich Islands, 1852, £200; British Guiana, 1856, £120; Natal, first issue,

£100; Cape of Good Hope, 1860, £40. A set of Sydney stamps are in the market for £600. The United States issue the greatest variety, 2,062. Great Britain circulates 905; Mexico, 260; Spain, 250; but these include post-cards, envelopes, news-bands, and local issues, which are rarely seen outside their respective countries. There are about 6,000 different stamps used for postal ocean service throughout the world; if local sorts and other stamped productions are included, the total number of varieties will not fall short of 10,000.

162. Which bankrupt has failed for the largest amount?

The firm of Overend, Gurney, and Co., bankers, whose debts at the time of their bankruptcy exceeded eleven millions sterling, and whose failure entailed the bankruptcy of other firms and traders, the aggregate of whose liabilities totalled up to the enormous sum of one hundred millions. A disaster of probably much greater dimensions would have resulted from the stoppage, in November, 1890, of the firm of Baring Brothers, with liabilities exceeding twenty-one millions, or nearly double those of Overend, Gurney, and Co.; but their affairs were kept out of bankruptcy by the prompt action of the Bank of England, who, acting with all the leading banks of the kingdom, formed a joint guarantee fund. By this means a panic was averted, and the Bank of England undertook the winding-up of the estate, the realizing of the assets, and the discharge of liabilities. A great financial crisis was thus avoided, and very few, if any, resulting failures followed as spread such ruin in the case of Overend, Gurney, and Co. Amongst the bankruptcies since 1847, the following may be mentioned as cases in which the liabilities at the time of stoppage exceeded a million and a half, namely:—

	Failed for
Western Bank of Scotland	£9,000,000
City of Glasgow Bank	6,190,983
Sanderson, Sanderson, and Co.	5,299,000
Liverpool Borough Bank	5,000,000
Peto and Betts	4,000,000
Northumberland and Durham District Banking Company	3,000,000
Thurm and Co.	3,000,000
Dennistone and Co.	2,144,000
Sanderson and Co.	1,725,000

163. Have the bagpipes ever been used at a church musical service?

On the 24th of April, 1892, a military service was held in York Minster, on which occasion the bagpipes were introduced into the service. Eight kilted Highlanders of the Royal Scots,

under the leadership of Pipe-Major Matheson, played a Highland "Lament," as an integral part of the anthem, with an effect which was infinitely touching and beautiful. There was noticeable at the first skirl of the pipes a slight tendency to a smile; but it appeared to be instantly subdued by the solemn and pathetic wail, accompanied throughout by the soft roll of the muffled drums. The lofty nave and the pillared aisles of the stately minster caused the plaintive wail of the bagpipes to be very impressive, and Dr. Naylor, the eminent organist of the minster, showed that the bagpipes can be fitly introduced when the music of the anthem is suitable.

164. What is the largest sum ever paid for a single butterfly?

One hundred and fifty pounds for a beautiful specimen of *papilio Antimacus*. Mr. J. H. T. Rogers, naturalist, Freshwater, Isle of Wight, went twice to Africa to search for this rare butterfly, which, when secured, he sold to the late Mr. C. Hewetson, of Oatlands, Walton-on-Thames. It can be seen in his collection, which he left to the British Museum. Thirteen pounds was given in 1886, at a London sale, for a large white butterfly, and several other specimens were sold at prices ranging from three to four pounds. A celebrated collector, Baron Felder, formerly Burgomaster of Vienna, sold his collection of butterflies to Lord Rothschild for £5,000, and it is believed these may eventually be left to the British Museum.

165. Who was the first criminal arrested in England by the aid of the electric telegraph?

The earliest authenticated case of the arrest of a criminal through the aid of the electric telegraph is that of John Tawell, and occurred on the 1st of January, 1845. Having murdered a woman of the name of Sarah Hart, at Salthill, near Slough, he was hastening away to Slough Station on the Great Western line, when he was seen by a neighbour, who, having her suspicions aroused, visited the cottage of the murdered woman, discovered the crime, and communicated the same to the Rev. Mr. Champneys, vicar of Upton-cum-Chalvey. The reverend gentleman, hearing that the suspected man was dressed as a Quaker, immediately proceeded to Slough Station, whence he found Tawell had just started for Paddington. With the assistance of the station-master (Mr. Howell) a telegram was sent off to Paddington. On Tawell's arrival there he was readily recognised by Sergeant Williams, a detective, who followed him about the City, and

at length saw him locate himself at a lodging-house in Scott's Yard. Here he was, later on, apprehended, with £12 10s. in his pocket, and documents that led to his identification. He was, shortly afterwards, tried, condemned, and executed on 28th March for the murder. Messrs. Reid Brothers, the well-known telegraph contractors, City Road, London, manufactured and fixed the instruments which were used at Paddington and Slough. Some time after alterations were made, and they took these instruments down, and eventually presented them to the South Kensington Museum, where they are now to be seen.

166. Did postmen ever carry a bell with them on their rounds?

This custom was at one time prevalent in the large towns of this country. The letter-box at the head office was closed two hours before the dispatch of the night mail. Shortly afterwards a number of postmen set out to collect late letters and newspapers. Each man bore a locked leather satchel or bag, into which letters and other packets were dropped through a slit, on payment of a fee of one penny for a letter and a halfpenny for each newspaper, in addition to the usual stamp. The men carried a large bell, which was constantly rung to warn people of their approach. These collectors also called at the local offices for all letters on which the extra fees had been paid. Mr. Wilson Hyde states that these special fees were the perquisites of the postmen, and when the custom was abolished about 1859, compensation was given for the loss of the fees, the amounts ranging from £10 8s. to £36 8s. per annum.

167. Which newspaper in a foreign language has the greatest sale in this country?

According to M. Lemaitre, one of the managers of Langeròme's agency for the sale of foreign papers in London, this is unquestionably the halfpenny Parisian paper, 'Le Petit Journal,' the sale of which in London reaches about 1,700 daily, or more than three times the sale of the paper which most nearly approaches it, 'Le Petit Parisien,' of which 500 copies are sold daily in the Metropolis. 'Le Petit Journal' has a daily circulation in France of 950,000 copies.

168. How came the Australian colonies to be over-run with rabbits?

Rabbits were first introduced into Australia by a Melbourne squatter, who thought a pair of them would remind him of the old country. From this pair the great Australian rabbit plague arose. A single pair of rabbits can multiply in four

years into 1,250,000. The Cabinet of Sydney in the year 1887 destroyed 25,300,000 of them, having spent £700,000 in four years to mitigate the pest. Mr. Coghlan says that 100,000,000 acres of land have been more or less injured by rabbits. To check their onward march a fence of 290 miles between the Macquarie and Darling rivers was made, at a cost of £24,000; another of 346 miles from the Murray River northward; another of 260 miles on the southern line of Queensland; another of 340 miles from Albury to the Macquarie, but the rabbits broke through. The number of rabbit skins exported averages yearly—from New South Wales, 15,000,000; from Victoria, 3,000,000, the Cabinet of which Australian colony spends £15,000 a year in killing rabbits. South Australia also exports 1,000 bales of skins annually; and New Zealand, on the average, 6,000,000 skins every year.

169. Which naval vessel is known as the "Milk" boat?

The vessel *Elfin*, of ninety-three tons, is known in Royal yacht circles as the "Milk" boat, and until recently was under the command of Staff-Commander W. P. Haynes. She runs daily to Southampton from Cowes and back. The *Elfin* is entered amongst the five Royal yachts, of which she is the smallest, with her ninety-three tons displacement, and 181 indicated horse-power, and a continuous speed at sea of ten and a half knots per hour. She has a crew of twenty officers and men.

170. Which is the most curious naturally marked stone in the world?

Preference has usually been given to the famous stone of Oberammergau, which has a human face, full of sorrow, marked by the hand of Nature on its surface. A stone in the collection of the late Mr. Beresford Hope, and lent for exhibition to the South Kensington Museum, closely resembled a lady laughing; while another showed the head of an old man with eyes drooping, the expression of the face calm and meditative, hair and beard white with the frosts of seventy or eighty years, and the whole extremely venerable. In the Church of St. John, Pisa, there is a stone marked with red, blue, and yellow, the lines representing an old man with beard, and, with a bell in his hand, seated beside a small stream. The rock that crowns the summit of Adam's Peak, in Ceylon, forms a platform, 74ft. by 24ft. in area, and on the horizontal face of this is a hollow, resembling in form a human footprint, but 5ft. 4in. in length, by 2ft. 6in. in breadth. This supposed footprint is bordered with gems, and protected from the weather by a wooden canopy. It

is held in high veneration by the Cingalese, who make frequent pilgrimages thither. When nearing Rio Janeiro from the sea the voyager sees a rock, which has the shape of a massive stone head, somewhat resembling in its profile the first Duke of Wellington, particularly as to the nose and chin. At Salisbury Crags, Edinburgh, the portion called "Samson's Ribs" is strongly marked like the gigantic ribs of a man; while the brow of the adjoining mountain, "Arthur's Seat," bears from some positions a likeness to a lion's head.

171. Has a marriage ever been celebrated in a cemetery?

On the 15th of June, 1892, Colonel Hendrik Stamp was married to a daughter of the late General Hammond, at Baltimore. Colonel Stamp was formerly the Danish Military Attaché in the United States. The pair were not married in church, but in the cemetery, where the bride's mother is buried, as well as her father. The Colonel stood on the grave of his dead father-in-law, whilst the bride stood on that of her mother. A large number of wedding guests were present at the ceremony, who congratulated the happy pair so soon as all was over.

172. What celebrated artist completed a picture for exhibition in one day?

Sir Edwin Landseer, who was noted for the rapidity with which he worked, performed this feat. Sir Edwin had promised to send a picture in time for the spring exhibition of 1845, at the British Institution in Pall Mall. On the day before the opening the Hanging Committee received from Landseer an empty frame, which, with some daring, they placed on the line. Mr. Vernon Heath was sent in haste to the studio; and Landseer was found, palette and brushes in hand. Mr. Heath followed him into the studio, where, pointing to an untouched canvas on his easel, Landseer said, "I shall send that to the Institution to-night—a finished picture—and have consequently given orders not to be disturbed, for on that depends whether I can complete the task I have set myself." The picture was finished in one day and duly sent on, and is familiar to visitors to the National Gallery under the title of "The Cavalier's Pets." Sebastian Bourdon was one of the most eminent French painters. So rapid was his execution that he is said to have completed in one day twelve portraits from life and as large as Nature, and these were esteemed among his best productions. Another remarkably rapid artist was Jan Baptist Weeninx, called the "Old" to distinguish him from his son and pupil, also named

"Jan," or "John," called the "Young." This eminent Dutch painter frequently sketched and finished pictures five or six feet in height in the course of a single day; and particularly one representing a bull baited by dogs, painted from Nature and completed in one day. In a single summer's day he painted three half-length portraits of the size of life, with all their surroundings. He excelled in almost every department of painting—history, portraits, animals, landscapes, and marine scenes, and was one of the best painters of birds of the Dutch school.

173. What individual lived for many years on a pillar sixty feet high?

This was accomplished in the early part of the fifth century by Simeon the Stylite, one of a remarkable class of ascetics known as Pillar-Saints. He passed the early part of his manhood in extreme seclusion in his monastery, not moving from his narrow cell for a period of nine years. Increasing in enthusiasm, he withdrew to a place about forty miles from Antioch, where he built a pillar, on the top of which, only a yard in diameter, he took up his position. From this pillar he removed to several others in succession, each higher than its predecessor, till at last he attained to 40 cubits, or about 60ft. in height. In this mode of life he spent thirty-seven years, his neck loaded with an iron chain, and his lips engaged in constant prayers, during the recitation of which he bent his body so that his forehead touched his feet. His powers of fasting were no less marvellous; he is said to have frequently limited himself to a single meal in the week, and during the forty days of Lent abstained entirely from food. The fame of his sanctity brought crowds of pilgrims from the most distant countries to see him; and the admiration of his austerities is said to have converted many pagans and Saracens to the Church. In consequence of an ulcer on one of his legs, he was obliged for the last year of his life to remain on his pillar upon one foot. In this position he died A.D. 460, aged seventy-two years.

174. Where is the biggest orchard in the world?

In Barbara, Cal., U.S.A., belonging to Elwood Cooper. It is a tract of 1,700 acres, and contains 10,000 olive trees, 8,100 in full bearing, the remainder being young trees set out during the past year and a half. Besides the olive trees there are 3,000 English walnut trees, 4,500 Japanese persimmon trees, 10,000 almond trees, and about 4,000 other fruit and nut trees. The 10,000 olive trees yielded 40,000 quart bottles of olive oil

in 1891, which found a ready market at 5s. per bottle. The nut trees bore thousands of bushels of nuts, to say nothing of the Japanese persimmons. Taken all in all, it has been calculated that Mr. Cooper's orchard brings him an income of not less than £150 per acre every year. Lord Sudeley has the largest orchard in this country. It extends to 500 acres, and yields its owner a return of £10,000 a year. A pear orchard in Jersey contains 60,000 trees. It is estimated it would require a fleet of 100 steamers to carry one season's fruit into the markets of the world. Fruit cultivation is on the increase in the United Kingdom—the area under cultivation as orchards in 1891 reached 202,305 acres; in 1883 it was only 190,710.

175. Is it a fact that a registered letter can be traced to all the officials through whose hands it passes, from sender to recipient?

Yes. Every registered letter is accompanied by a bill, which is signed by every official through whose hands it passes, except when the letters go from a sub-office to the central office of a town. The registered ones are put by themselves into a green bag, in which they are carried by the postman. When a postman takes letters out for delivery he signs his name separately for each registered letter, and he must obtain the signature of the person who receives it when it is delivered. The fee for a registered letter was at one time 2s. 6d.; seventeen years ago it was 1s.; but in 1878 it was reduced to 2d., in which year 6,500,000 registered letters were sent instead of 4,316,000 the year before, and as contrasted with 1,300,000 twenty-nine years ago. In the twelve months ending March 31st, 1892, the number of letters registered in the United Kingdom was 12,077,368, an increase of 720,171 on the previous year. Registered letter envelopes, bearing a twopenny stamp embossed on the flap, are supplied of various sizes, at from 2d. to 3d. each; and, if these are used, the Post Office makes good any loss up to £2. Letters can be registered by rural postmen on their rounds.

176. Where are the cheapest restaurants in the world established?

In New York, where good, wholesome, well-cooked, and cleanly-served meals are provided at prices varying from 4 cents (2d.) to 10 cents (5d.). For the latter price a good dinner of three courses can be obtained: Soup; meat, roasted or boiled, with three sorts of vegetables and bread, and a pie or pudding. At one of the cheap restaurants in Vienna a man

may eat and drink well for 15 sous, or 7½d. per day. The following are some of the prices charged: Vegetable soup, three-sevenths of a penny, or rather less than a halfpenny; bread, one-seventh of a penny; tea or coffee, three-sevenths of a penny; egg, two-sevenths of a penny; slice of ham or beef, six-sevenths of a penny. The bill of fare changes every day, and no intoxicants are provided. In Geneva the cheap restaurants are open from 6 a.m. in summer, and 7 a.m. in winter, till 8 p.m. The prices, which vary from 5 cents. for bread to 25 cents. for a litre of wine or a plate of meat, admit of a workman getting a good meal for 75 cents., the only restriction being that not more than half a litre of wine is to be supplied to a single consumer. The prices are at the same rate for articles purchased to be consumed at home, and all the provisions are of excellent quality. In both cities these cheap restaurants are carried on with profit.

177. Which farm in this country has the largest number of milch cows?

In Devonshire, Mr. W. P. Vosper, of Merafield, Plympton, rents three farms under the Earl of Morley, on which in 1891 he had 257 cattle, including 130 milch cows, 22 cows in calf, 10 heifers in calf, 15 yearling heifers, 70 fattening cattle, 6 calves, and 4 bulls. In Cheshire there may be found farms with 50 milch cows each. One such farm covered 200 acres, of which fifteen were under wheat, worth £180; while the pigs brought £150, and the sheep £133. Thus the total receipts amounted to £1,213; while the rent was £400, taxes came to £60, the labour of seven persons cost £296, and sundries, £268; leaving the farmer a balance of £189 to support his family. In the United Kingdom there are 3,400,000 milch cows, each yielding on the average 400 gallons of milk yearly; out of which are manufactured 110,000 tons of butter and cheese, the value of the butter, cheese, and milk amounting to £31,200,000 sterling. Professor Sheldon considers 600,000 cows are required to furnish London's demands for dairy products, 84,000 of them for milk alone. Within the Metropolitan radius about 10,000 cows are kept in 1,100 cow-sheds, by 395 owners. Something like 4,000 horses are employed in the delivery of London's milk.

178. What is the oldest piece of music in the world?

The most ancient piece of music which is still in existence is called the "Blessing of the Priests," and due to the nation which has produced the greatest number of musical composers

of the first class that the world has known. This song, or chant, was sung in the Temple at Jerusalem, and is still to be heard in the Jewish synagogues in Spain and Portugal. A score of the Orestes by Euripides is still preserved (490–417 B.C.). The fragment of papyrus roll on which the score is written is kept in a small iron box, or safe, and was lately one of the exhibits at the International Exhibition of Music and the Drama in Vienna. The oldest piece of English music, dated 1226, is preserved in the British Museum among the Harleian manuscripts, under the title of "Sumer is i cumen in." It was the work of a monk of the Abbey of Reading. It is written upon six red lines in square and lozenge black notes of three kinds. Burney, in his "History of Music," published in 1776, mentions three valuable and ancient musical manuscripts, found among the papers of the famous Archbishop Usher in Ireland, with Greek notes and musical characters. They consist of a hymn to Calliope, another addressed to Apollo, and a third to Nemesis; and are supposed to have been the productions of the Greek poet Dionysius.

179. Has a lady's dress ever been made and sewn on a living person?

This occurred with the Duchess of Portland, who, so far as is known, is the only woman who has gone through the ordeal of having had a dress made and sewn on her person. Her Grace, having engaged a well-known firm of dressmakers in Bond Street to undertake the work, stood upright for three hours while the dressmakers were busy fitting and sewing. Fifty yards of old lace were used. Princess Louise and the Princess of Wales have models of their figures, in exact imitation of Nature, in the possession of their dressmakers, thus avoiding all trouble of fitting and trying on. The Princess of Wales chooses her own dresses with great care, and after receiving water-colour designs, frequently takes her own brush and marks some alteration in the design by way of improvement.

180. In what part of the world do a cow and a calf form necessary figures at a marriage ceremony?

In India, where some of the tribes have such a custom. The man conducts his betrothed into some water; they are accompanied by a priest, and also take with them a cow and a calf, which are driven into the water. The man places his hand by the priest's hand, and the woman places hers next that of the bridegroom, and all three clutch hold of the cow's tail, while

the officiating priest pours water upon the cow and the calf, at the same time uttering a religious formula. The two are then made man and wife by their clothes being tied together by the priest. The latter claims the cow and the calf for his part in the ceremony, and the happy pair deposit money presents on the various idols to propitiate them, which gifts find their way into the priest's exchequer, so that he is handsomely rewarded for his services.

181. Where is the earliest caricature drawing in existence to be found?

In the museum at Turin, in Italy, where there is a papyrus roll which displays a whole series of comical scenes. In the first place a lion, a crocodile, and an ape are giving a vocal and instrumental concert. Next comes an ass dressed, armed, and sceptred like a Pharaoh. With majestic swagger he receives the gifts presented to him by a cat of high degree, to whom a bull acts as proud conductor. A lion and gazelle are playing at draughts, a hippopotamus is perched in a tree, and a horse has climbed into it and is trying to dislodge him. Besides these there is a Pharaoh in the shape of a rat, drawn in a carriage by prancing greyhounds, which is proceeding to storm a fortress garrisoned by cats, the latter having no arms but teeth and claws, whereas the rats have battle-axes, shields, and bows and arrows. In a papyrus in the British Museum a flock of geese are being driven by a cat, and a herd of goats by two wolves, with crooks and wallet; one of the wolves is playing a double flute.

182. Have idols ever been arrested and punished?

A curious case of arrest and punishment of idols took place at Foochow, in China. The idols of a certain temple in that city were those appealed to by persons who desired to be revenged on their enemies. They were supposed to cause death to those against whom prayers to them were directed. Some time ago the Tartar military commander died suddenly, and the idea got abroad among the people that he had been slain by the idols in question. The Viceroy of the province hearing this, at once gave orders that they were to be arrested and punished. The Prefect was instructed to see the decree carried out, and, armed with the Viceroy's warrant, went to the temple and had fifteen idols arrested. These were of wood, and about 5ft. high. Before being brought for judgment before the Prefect, their eyes were put out so that they should not see who was their judge, and be able to trouble him either here or hereafter. After a full investigation, a report was sent to the

Viceroy, who gave orders that the idols should be beheaded, their bodies cast into a pond, and their temple sealed up for ever, to prevent them from troubling the peace of the city in future.

183. Which actor performed during the most reigns in this country?

Mr. Cave Underhill, the famous comedian, who performed in the reigns of Charles II., James II., William III., Queen Mary, and lastly of Queen Anne. He was a notable example of honourable long life among players of the past. He appeared as a comedian before three generations of playgoers, and enacted the "First Gravedigger" at his last benefit, when he was considerably more than threescore years and ten. Underhill was described as being particularly correct and natural in his characters, and ever avoiding that general fault in players of doing too much. He never lost sight of Shakespeare's own instructions—that the clowns should speak no more than was set down for them; and did not attempt the ingenious feat, common enough in later days, of adding to his authors.

184. Was any picture ever carried in the funeral procession of the artist who painted it?

"The Transfiguration," by Raphael Sauzio (known as Raphael), upon which this great painter was engaged when seized with his fatal illness, was hung over his bed as he lay in state, and was carried in his funeral procession. The painting, which was executed for the Cathedral of Narbonne, in France, is now in the gallery of the Vatican at Rome. The lower part, which was left unfinished at Raphael's death, was completed by his pupil Giulio Romano. It was carried to Paris in 1797, but was afterwards restored to the Vatican. The picture is divided into two parts; the upper part representing the three disciples lying prostrate upon Mount Tabor, while above them is the figure of Christ in glory, with Moses and Elijah on either side. The lower part represents a crowd of people bearing along a boy possessed with an evil spirit. The two parts of the picture are united by the uplifted look and appealing gesture of some of the figures in the crowd below, who seem to look for help to the Saviour on the Mount.

185. Which living author's works (1892) fill the most space in the British Museum catalogue?

Lord Tennyson's occupy fifty-two pages, 236 books appearing under his name. Of these 170 are editions of his own poems

or selections from his poems, the remainder consisting of biographies of the poet, critical essays on his writings, concordances, keys, studies, guides, illustrations, companions, and a few dealing with his "Homes and Haunts." The Right Hon. W. E. Gladstone's fill twenty-two pages in the catalogue. Mr. Gladstone's most popular work was his pamphlet on "The Vatican Decrees" (1874), which ran through 110 editions, and was translated into several European languages. Amongst his other important works may be mentioned: "The State in its Relations with the Church" (1838); "A Manual of Prayers" (1845); "Studies on Homer" (3 vols., 1858); "Chapter of Autobiography" (1868); "Juventus Mundi" (1869); "Vaticanism" (1875); "Homeric Synchronism" (1876); and "Gleanings of Past Years" (7 vols., 1879). Referring to past authors, the works under Sir Walter Scott's name occupy two volumes and a half of the catalogue, each volume containing about 100 pages.

186. Have any towns honoured the memory of the mothers of celebrated men?

Two mothers of great men, namely, the mothers of Schiller and Kepler, received memorials in the native town of both—Leonberg, in Wurtemburg, which is situated about six miles from Stuttgart. The town council of this "Town of Mothers," as it justly and proudly calls itself, affixed tablets to the walls of the old castle of Duke Ulrich, the Well-Beloved, in honour of the mothers of the celebrated poet and astronomer. It was at this castle that the Magna Charta of Würtemburg liberties was signed by the Duke.

187. Has a church ever been flooded with honey?

This occurred in the Episcopal Church in Tulare County, California. A swarm of vagrant bees, while in search of a suitable home, found an admirable location in the loft of that church, where, having an abundance of space, they increased and multiplied, and at the same time laid up a large store of honey. Great white combs were attached to the rafters overhead, and added to until hundreds of pounds of honey were hidden away in the waxen cells. This went on until an unforeseen contingency arose in the great wave of heat which occurred in that part of the world, and the temperature of this church hive at last reached the melting point. The wax gave way beneath the torrid heat, and down the rafters, scantlings, and joists began to flow streams of liquid sweetness. Through every crevice it poured, and soon altar, pulpit, chancel, and pews of the sacred edifice were treated to such a

flood of honey as had never been witnessed before. Seven stone weight of honey was found in a cavity of the roof of a church at Burnham Norton, Norfolk, while some repairs were being executed. During alterations at the parish church of Long Clawson, a comb of honey was discovered which measured 5ft. in length and 2ft. in width.

188. Are horses in any country fed on bark?

The hardy ponies of the North American Indians generally subsist upon the bark of the cottonwood tree, and as a rule, although it does not afford the same amount of nourishment as hay or grain would do, they appear to prefer it, on account of its freshness. In selecting their encampment the Indians make it a point of the greatest importance that it shall, if possible, be located on that part of the banks of a stream where the cottonwood trees are most numerous. The limbs of these trees are cut into pieces of about four feet in length and thrown to the ponies, who immediately proceed to manipulate them in the same manner as a dog does a bone, by placing a forefoot on the limb and tearing off the bark. By a recent discovery, wood has been utilized as an ingredient of food for cattle. The cellulose of the wood is converted into grape sugar, to which is added 40 per cent. of wheat, oats, or rye. Other ingredients are sometimes added for bone forming, such as phosphates and lime. This wood glucose bread, as it is called, is very nutritious, and makes an excellent substitute for oil-cake and similar compounds.

189. Can a promise of marriage be made otherwise than by words?

Upon the authority of Mr. Justice Wright, it can. In trying a breach of promise action at the Leeds Assizes in 1892, he stated that "a promise of marriage may be made by other ways than by words—by a shake of the hand, for example, or a wink of the eye, or a thousand other modes." The case which gave rise to this rather alarming dictum on the part of the learned judge was that of a drawing-master and a fair pupil. He gave the young woman every reason to believe that he loved her, and wrote her many letters descanting on the joy which all true lovers feel. After two years of such dangling, the art-master broke off the acquaintance, and the lawyers were called in. To them he confidently wrote: "If you have a letter of mine wherein direct marriage is stated, I am willing to see further; but you have not." The drawing-master evidently calculated that not having promised

marriage in so many words, he was on the safe side, but found himself sadly mistaken, for the jury, guided by Mr. Justice Wright's instruction, awarded the lady £100 damages.

190. What was the smallest fee ever taken by counsel?

The smallest fee ever taken by an English counsel was sixpence, that fee having on one occasion been taken by the late Sir John Holker. Barristers' fees were in olden times much less than those now paid. An entry occurs in the churchwardens' accounts of St. Margaret's, Westminster, for 1476, showing that a fee of three shillings and eightpence, with fourpence for his dinner, was paid to Robert Fylpott, counsel, learned in the law, for his advice. In Nare's "Glossary," a barrister's fee was stated to be an angel, or ten shillings. These are somewhat different figures to the six hundred guineas paid to Sir Charles Russell, five or six years ago at the Leeds assizes, for less than three hours' work, or at the rate of over three guineas a minute.

191. How many snuff-boxes are made in this country every year?

Not more than three or four thousand, the great bulk of those now sold in this country being imported. At one time jewelled snuff-boxes were a favourite form of gift, especially by Royalties, but the practice has almost gone out of fashion. The quantity of tobacco retained for home consumption in 1890 was 2,999,292lb. of manufactured and 55,837,672lb. of unmanufactured. Snuff is not given separately in the Customs returns, but what is imported is included in the first item, and that manufactured in this country in the second. The Inland Revenue report only gives the separate figures as to snuff when dealing with the quantity exported on drawback. This for the year 1891 was 1,049,919lb., made up as follows, namely: High-dried, 10lb.; Scotch, 11,955lb.; rappee, 4,098lb.; and other sorts, 1,033,856lb.

192. Where is the longest flume in the world?

That which conveys the water from the mountains to the reservoir of San Diego, California. It is 35 miles long, and is built almost wholly of redwood. In its course this monster flume crosses 315 streams and canyons on trestles, the longest of which, the Los Cochos, is 1,700ft. in length and 85ft. high. The Sweetwater trestle, the second longest, is 1,200ft. long and 85ft. high. The timbers used in them were put together on the ground and raised to their present position by horse-power. Besides its many trestles this flume passes through eight

tunnels, the longest being 2,100ft. in length. The tunnels are each 6ft. by 6ft. in size, with arched roofs. In the larger meaning of the word flume, which includes any water channel, the longest is that which conveys water from Lake Thirlmere to Manchester, which is 100 miles in length—a tunnel, about three miles in length and 270ft. below the surface, forming the first part of the flume or aqueduct. It is large enough to convey fifty million gallons of water per day. The next longest is that from Lake Vyrnwy to Liverpool, 67 miles, followed by one conveying water to Marseilles, 60 miles in length.

193. What play has the greatest number of speaking parts?

The "Passion Play," which is performed every tenth year at Oberammergau, a little village of 1,349 inhabitants, forty-five miles south-west of Munich; 700 actors are required, who all belong to the village. It is held in a large, open-air theatre, which accommodates 6,000 spectators. It is the only existing specimen of the mediæval mysteries or miracle-plays, which were general in this and other countries in the Middle Ages. The villagers regard the "Passion Play" as a solemn act of religious worship, and the performances are characterized by the greatest reverence. The proceeds are devoted to the good of the community, after defrayal of the costs and payment of a small remuneration to the actors. The principal parts are usually hereditary in certain families, and are assigned with regard to moral character as well as dramatic ability. It is considered a disgrace not to be allowed to take part in the play, and the part of "Christ" is looked upon as one of the highest honours. The performance, which lasts nine hours, is attended by many thousands of European and American visitors. In Shakespeare's play of "King Henry VI." (second part), there are forty-six speaking parts, without including any of the characters classed as lords, ladies, attendants, petitioners, aldermen, beadle, sheriff and officers, citizens, apprentices, falconers, guards, soldiers, messengers, etc.

194. When was the last duel fought in this country?

There was a duel fought in Ireland as lately as 1851, between the Mayor of Sligo and a lawyer, but no blood was drawn on that occasion. In the same year two Frenchmen fought a duel at Egham, in Surrey, which was equally harmless. The last duel fought in England between British subjects took place on the 20th of May, 1845, at Southsea, between Captain Seton, of the 11th Hussars, and Lieutenant

Hawkey, of the Royal Marines, arising out of attentions paid by the former to the wife of the latter. They fired at fifteen paces, and in the second round Mr. Seton fell mortally wounded. On the 16th of July, 1846, Lieutenant Hawkey, surrendering to take his trial, was arraigned before Mr. Baron Platt, for the wilful murder of Captain Seton. The jury returned a verdict of "Not Guilty," and Lieutenant Hawkey was afterwards restored to his commission in the Army. The last duel on record fought by a British subject took place on the 22nd of October, 1862, at St. Germains, between Mr. Dillon, editor of 'Le Sport,' and the Duc de Grammont Cadérousse, in which the former was mortally wounded. One hundred and seventy-two duels were fought in this country during the reign of George III.

195. What is the weight of the smallest lock and key ever made?

One grain, which was the weight of one made by a London blacksmith, Mark Scaliot, in the twentieth year of the reign of Queen Elizabeth. The lock contained eleven pieces made of iron, steel, and brass, and together with a pipe-key only weighed one grain. Scaliot also made a chain of gold of forty-three links, weighing half a grain. The chain, to which was fastened the lock and key, was put about the neck of a flea, and was drawn by it with ease. Mr. R. J. Lewis, of Park Road, Hockley, Birmingham, has made, and has in his possession, a lock and key which weigh only one grain and a half. A lock, made by Mr. George Sibbald, of Roundhay Road, Leeds, is in twelve pieces, and weighs under three-quarters of a grain.

196. Was any entrance door ever provided with a silver knocker?

On the hall door of a house near Berkeley Square, London, there was an antique silver knocker which had once adorned the palace of a Venetian noble in the City of the Sea. In olden days knocker-wrenching was a rather favourite kind of amusement on the part of young men of a wild disposition. This knocker did not escape the attention of these mischievous youngsters, but it was so securely fastened as to defy all ordinary efforts to twist it off. Lord Charles Beresford, then a very young naval officer, determined not to be beaten. At three o'clock one morning, accompanied by a young Guardsman, he drew up at Lord Bath's door in a hansom. They had procured a rope. One end was tied with considerable slack to the knocker, and the other to the hansom. All being ready, the

conspirators entered the cab, and the driver whipped up his horse to full speed. The consequence was that not only the knocker but also the panel was torn from the door and carried off in triumph. The matter leaked out, and was settled on surrender of the knocker and payment of damages. The knocker is said to remain on that door to the present day.

197. Why does smoke ascend?

Heat has an expansive effect on all bodies, on solids, still more on liquids, and most of all on gases, such as the atmosphere. It makes the air lighter, so that its weight is less in proportion to the space which it occupies; or, to speak scientifically, decreases its density. Consequently it rises above the colder and heavier air, which descends, and the air ascending carries up the smoke, that is, the particles of carbon; while the heavier matter, the cinders, remains below. Some might suppose air to be always so light that its weight could not be so reduced as to have this effect. But 100 cubic inches of air, at the level of the sea, weigh 31 grains. The pressure of the atmosphere on a square inch is equal to that of a weight of about 15lb.

198. What is the highest price ever given for a lady's hat?

The most valuable ladies' hats become so by reason of being ornamented with jewels, old lace, or costly feathers. The highest prices given for hats range from fifty to a hundred pounds, such prices, however, being frequently due more to the fame of the artiste than to any intrinsic value in the hat itself. At a bazaar held in the grounds of Muckross House, in 1892, to raise funds for Killarney Church, Mrs. Cornwallis West, after exerting herself all day at her stall, held up her hat and offered it to the highest bidder, and, after a spirited competition, it was knocked down for five-and-twenty pounds, the purchaser immediately returning it to the owner as a gift.

199. Can any plant be propagated from leaves?

It is possible, as Julius von Sachs tells us in his "Physiology of Plants," to produce new plants from cut-off pieces of leaves as well as of shoots, and often even of roots, under favourable conditions of vegetation. In the true mosses, each of those cells or vessels of which the substance of a plant is formed, though so small as to be indistinguishable by the naked eye, whether it comes from the roots or from the leaves, may grow out under favourable conditions, become rooted from new shoots, and give rise to an independent living plant. But

besides these, the leaves of the *Achimenes grandis* and of the *Begonia rex*, which are natives of tropical countries, but belong to classes of plants extensively grown in English greenhouses and hothouses, can be employed for propagating them. The leaves being cut off, they are planted with the cut surface in water, or in moist sand or soil, and will develop there. In the first place, the layer of cells bounding the cut surface perishes. This dead tissue is frequently separated from the living tissue still farther by the formation of several layers of cork. Beneath this protection masses of tissue grow, produce leaves, and young shoots emerge. At the same time roots develop, break through the tissues, penetrate the soil, and contribute to the nourishment of the new shoots. Buds also shoot out from the leaves of ferns, as the common male fern; from those of the *Nasturtium officinale*, known to all as water-cress; and from those of the *Cardamine pratensis*, or cuckoo-flower.

200. Have a horse and carriage ever ascended to the top of a steeple?

The Church of Our Saviour, at Copenhagen, has a curious spiral staircase winding round and round on the outside of the spire. The Round Tower in the same city has no staircase at all; in place of one, there is a paved roadway inside it, turning round and round an inner circle, and thus rising at a gentle slope until it reaches the top. Horses and carriages, even, have at times made the ascent. Ferdinand VII. rode on horseback to the top of the tower of the Cathedral of Seville. The tower, which is three hundred and fifty feet high, has a vaulted pathway in the nature of an inclined plane, so easy of ascent, and so spacious, that it allows of two horsemen riding up abreast.

201. Is there any vegetable which can jump?

One of the curious products of Mexico is the jumping bean. They grow in pods, each pod containing three beans. They were often exhibited by South American jugglers, who placed them on a table, when they would immediately roll and skip about and make jumps of a couple of inches. This was at one time thought to be the effect of some magical property possessed by the beans, but Professor Riley discovered that these vegetables owe their jumping powers to a very simple agent, namely, the larva of a moth—the *Grapholitha Sebastiana*—which bores into them, and, striking its head against the interior of the bean, causes it to rebound. An American oak-gall exhibits movements even more extraordinary, owing to a similar reason.

The gall is inhabited by the pupa of a fly—the *Cynips saltatorius*—which possesses such muscular power, that by turning over it can make its temporary tenement jump a distance more than twenty times greater than its own diameter.

202. In what theatrical or operatic representation has the largest number of persons appeared on the stage?

In Reyer's opera of *Salammbô*, which was produced in 1891 at the Grand Opera House in Paris, there were fourteen hundred persons on the stage in the last act. The number of theatres or opera-houses with a sufficiently large stage for so many persons at one time is exceedingly limited. At the show of "Venice in London," which had such a successful run at Olympia, the stage was 450ft. in length and 120ft. in depth. Some marvellous spectacular displays were given by the 1,400 performers engaged under the management of Mr. Imre Kiralfy, and it was the unanimous opinion of visitors that there had never been a more charming spectacle than "Venice in London" exhibited anywhere. The greatest number of performers ever seen on the stage at Olympia at one time is 1,140. About 500 persons have been on the stage at Drury Lane at one time, while, including stage hands, etc., the Alhambra stage has seen as many as 300 performers at one time.

203. Which is the oldest wooden building in the world?

This is the church at Borgund, in Norway, which was built in the eleventh century, and has been preserved from the effects of the weather by repeated coatings of pitch. It is built of pine, and is of fantastic Romanesque design, with strangely-carved wooden pinnacles, and a great deal of carving in high relief all over the interior of the church. The old stone altar still stands, but the church is no longer used for service. In Norway, timber being plentiful, wooden buildings of all kinds abound, and in populous towns this has frequently led to very serious conflagrations.

204. What is the greatest age at which any person has committed suicide?

One hundred and six, a Russian, named Bulan, who had reached that great age, having committed suicide in 1892 at Ekaterinoslav. He left a letter in which he declared that life nowadays was insipid and uninteresting, compared with the good old times. In the suicide statistics for 1891, the numbers in France between 61 and 70 years of age were 93 per million;

between 71 and 80 years of age, 20; and over the age of 80, 16 suicides per million were returned. Mulhall gives the suicide statistics at great ages for England and Wales as follows: Between 65 and 75, 243 per million; between 75 and 85, 183; and over 85, 72 per million.

205. What was the highest price ever given for a pair of bellows?

Four hundred and seventy guineas, which was the price given some time ago in a London sale-room for a pair of bellows of Italian workmanship, and designed by Benvenuto-Cellini. Bellows are now largely used in connection with underground railways and foundries. The rotary blower invented by Messrs. Root, of Connersville, Indiana, in the United States, of late years used extensively in America and Europe, can be produced of vast power. One of these machines employed to give the blast in a pneumatic railway under Broadway, New York, delivers, when worked to maximum speed, a volume of 100,000 cubic feet of air every minute. A blowing engine erected at the Dowlais Iron Works in Glamorganshire, South Wales, in 1851, has a cylinder 144in. in diameter, with a stroke of 12ft., and discharges about 44,000 cubic feet of air a minute, at a pressure of 3¼lb. to a square inch. At the Lackenby Iron Works, Middlesbrough, Yorkshire, are compound cylinder blowing engines, in which each cylinder has a blowing capacity of 157 cubic feet, so that the blast supplied from both cylinders at the regular speed of 24 revolutions a minute is 15,072ft. per minute, and the supply of blast, including loss by leakage, amounts to 190,000 cubic feet per ton of iron made.

206. What is the difference, if any, between an alligator and a crocodile?

The crocodile and alligator are not just the same variety of reptile with different names, as is sometimes imagined. There are certain well-marked differences between them. For instance, in the crocodile the toes are completely webbed, and each of the hind legs has a toothed fringe; while in the alligator the hind legs are simply rounded, and the feet not completely webbed. Moreover, in the former one of the canine teeth of the lower jaw is always visible when the mouth is shut, but is perfectly hidden under the same conditions in the alligator. The crocodiles inhabit the rivers of tropical Africa, Asia, and Australia, whilst the alligators are found in America. One or two species of crocodile, however, have been found in the West Indies, and one species of alligator in China. They possess the most powerful jaw force of any animal known—

the contractile force having been ascertained to be 1,540lb. The alligator never leaves fresh water, while the crocodile often goes to sea, and in the West Indies has been found many miles from land, heading for an island at a very considerable distance. The alligator at the Crystal Palace is said to have fasted for over eighteen months, which completely puts the human fasters into the shade.

207. Was a coin ever issued representing a monarchy on one side and a republic on the other?

This occurred in France in the transition period between the French Republic and the Second Empire. The coin was struck off just at the moment of the assumption by Napoleon the Third of the reins of empire. Only the die for the obverse of a new coin had been completed, and, either by accident or of set purpose, a coin was struck off which bore the head of "Napoleon III., Emperor," on one side, and "French Republic" on the other. This contradictory coin, which is now valuable, is of interest apart from numismatics, as symbolizing the many sudden changes which took place in French politics during the past century.

208. Where is the largest reflector in the world?

At Genoa, in connection with the Italian-American Exhibition held there in 1892. The electric light in the tower, or "phare," was provided with a parabolic reflector, having a diameter of 1,600mm., which is the largest in the world. The rays of light from this reflector were visible for a distance of forty miles. A reflector made in 1800 by Mr. Parker cost £700. It was purchased by Captain Mackenzie, who took it to China; it is now at Pekin. The Coburg or Victoria Theatre possessed the largest reflector ever made in the form of a drop scene, being a large mirror 36ft. high and 32ft. wide, and composed of sixty-three divisions, inclosed in a gilt frame, and was raised bodily. In 1881 an idea of utilizing solar heat for practical purposes was tried in Paris. A reflector for concentrating the sun's rays within an area of 120 square yards was used. It boiled eighty-eight gallons of water in forty minutes, and pumped 174 pints of water 10ft. high per minute.

209. How many men of colour have been elected members of Parliament in this country?

Three, including Mr. Dadabhai Naoroji, who was at the last General Election returned as member for Central Finsbury. A notable man of colour elected to the British Parliament was Mr. David Ochterlony Dyce-Sombre, who,

having in 1836 inherited from his grandfather's widow, the Begum of Sirdhana, a fortune of half a million sterling, repaired to England in 1838, and at once became one of the most notable personages in society. He was elected for the Suffolk Borough of Sudbury to the Parliament which met in August, 1841, but was afterwards unseated for bribery. Mr. John Stewart, another M.P. of colour, was more happy in his career, and, though the West Indies anti-colour party could never forgive his election, his wealth and munificence carried him successfully through a long life to a regretted death, on the 14th of March, 1860. He served as member for the Borough of Leamington in four consecutive Parliaments, namely, those of 1833-34, 1835-37, 1837-41, and 1841-47. At the General Election of 1847 he was defeated by the Hon. George Keppel, afterwards sixth Earl of Albemarle.

210. What is the smallest book published during the last fifty years?

A complete French translation of Dante's "Divine Comedy" was exhibited at the Paris Exhibition of 1882, the volume being so tiny that it measured less than half an inch square. It comprised 14,328 verses, and was contained in 500 pages, to make which only two sheets of printer's paper were required. Mr. E. A. Robinson, of Grimsby, some time ago published a book appropriately called "The Mite," which measured three-quarters of an inch either way, and was amply illustrated. A minute edition of Jeremy Taylor's "Marriage Ring" was published by Mowbray and Co. It is about the size of an ordinary railway ticket, and is bound in white silk, with silver edges to the leaves. A book which has been deposited in the Salford Borough Library is written on 100 leaves of rice paper, in Maharatta characters, and measures only half an inch square. In possession of Lord Dufferin's family is a copy of the sacred book of the Sikhs, only one-half the size of a postage-stamp.

211. Has a theatrical performance ever taken place on an elephant's back?

The Berliners enjoy the novelty of an immense elephantine structure located in the beautiful garden of the hippodrome. The monster is over 45ft. high, his uplifted trunk carries an electric light, and a winding stairway leads through one of the legs into the hollow space of the giant. There an Oriental stage greets the eye, with a set of Arabian actors, four women and two men. The audience, which is restricted to twenty-five, occupy the parquet. Crowds clamouring for admission surround the elephant day and night. Henry Harris, when manager of

the Covent Garden Theatre, purchased a large elephant, called Chung, for which he paid 900 guineas, and which took part in the pantomime, mounted by Mrs. Johnston. An elephant, called Chief, took part in the pageant of victory in the play, "Fall of Babylon," performed at a New York theatre a few years ago, in the course of which the elephant received a severe shock by seizing the electric-light wire with his trunk.

212. Have glass types ever been used for printing?

The French newspapers some time ago were testing a novel sort of type, made of malleable glass by a new process. The new types preserve their cleanliness almost indefinitely. They are said to wear better than those made of metal, and can be cast with a sharpness of line that will print more distinctly than is possible with the old style type. Some practical printers in this country give it as their opinion that glass types are useless. "Every printer can understand," says the 'Printing and Paper Trades Journal,' "how unsuitable such a fragile material would be for the rough usage of the printing office. Ordinary metal has to include amongst its qualities a certain degree of malleability. When continually stereotyped from, it 'grows'—that is, becomes elongated, or higher to paper. Glass would not meet this essential requirement." In 1878 the 'Caslon Circular' took up this glass notion, and said: "We have had the opportunity of inspecting a sample glass type, which is now in our possession, a nonpareil 2-line Latin compressed R. This type is out of the square on every side, round at foot, and dreadfully wedge-shaped—in fact, a most inaccurately cast type, left undressed for the simple reason that the material cannot be dressed."

213. What member of Parliament held the same seat for upwards of forty years with only one contested election?

Colonel Wilson-Patten (afterwards Lord Winmarleigh) was returned in 1830 as member for the undivided constituency of Lancashire. In 1832, after the Reform Bill, he was elected for the northern division of the county, and held the seat until he was raised to the peerage in 1874. That would, in any case, be a remarkable tenure of one seat, and, in Colonel Wilson-Patten's case, it was rendered more striking from the fact that, in all that long series of years, he only once went through a contested election. That was in 1868, when he and Colonel Stanley (Lord Stanley of Preston) were opposed by Lord Hartington (Duke of Devonshire), whom they defeated. Sir Robert Walpole was elected member for King's Lynn, otherwise called Lynn

Regis, in Norfolk, in 1702, and sat for it in the House of Commons till 1742, when he went to the House of Peers as the first Earl of Orford, at which date he had been Prime Minister of England for twenty years continuously. Henry John Temple, third Viscount Palmerston, who was born October 20th, 1784, was returned to the House of Commons for Horsham in 1807, and became a member of the Government the same year; was elected for Tiverton, in Devonshire, June, 1835, and represented it till his death, October 18th, 1865.

214. What is the length of the shortest pendulum that has ever been used?

Professor C. V. Boys, F.R.S., in a lecture in December, 1891, on "Time," delivered at the London Institution, described pendulums of different lengths, showed how they swung at different paces, and proceeded with the aid of the limelight to demonstrate the point. The Professor stated that to swing ten times in a second, the pendulum must be four-tenths of an inch long. If it were wound up to a quarter of that length, it would swing twice as fast, and that was the length of the shortest pendulum that had ever been used. An electric pendulum may be of the shortest length possible. It consists of merely a small pith ball attached, by means of a silk thread, to a brass rod resting on a glass support. It is employed for ascertaining whether a body is electrified. If the body in question is presented to the pendulum, and the pith ball is attracted towards it, that body is proved to be electrified.

215. Where is the largest natural arch in Europe?

Natural arches may be above ground or under ground; may cross ravines, or may form or support the roofs of caverns. The largest and most magnificent stalactite cavern in Europe is the famous one at Adelsberg, in Austria, twenty-six miles east of Trieste. It is divided into four grottoes, with two lateral ramifications, or passages going off from the sides, each of which extends to a distance of a mile and a half from the entrance. The Franz-Joseph-Elizabeth grotto, the largest of the four, is an arch 665ft. in length, 640ft. in breadth, and more than 100ft. high. Besides the imposing proportions of its chambers, this cavern is remarkable for the variegated beauty of its stalactite formations, some resembling transparent drapery; others, waterfalls, trees, animals, or human beings, the more grotesque being called by various fanciful names. The Peak Cavern, at the High Peak, in Derbyshire, is half a mile south-west from Castleton. It is 600ft. below the summit of the mountain, and is approached through a chasm between two

lofty cliffs. It is entered by a natural arch, which is 42ft. in height and 120ft. wide. The cavern penetrates the mountain 2,250ft., the aggregate descent amounting to 800ft. It expands into several chambers, one of which is an archway 220ft. long, 210ft. wide, and about 120ft. high. At Hirnis-kretschen, in Bohemia, there is a most colossal and ruggedly beautiful arch, the summit of which is upwards of 1,400ft. above sea level.

216. If a hole were drilled right through the earth, would a stone dropped in come out at the other side?

No. If such a hole were made and a stone dropped in, it would—assuming the earth to be of the same density throughout—fall with an ever-increasing velocity till the centre was reached, and then continue its journey towards the other side till the velocity with which it was proceeding was overcome by the force of gravitation, which would then be acting as a pull in the contrary direction. As soon as this happened the stone would commence a fresh journey towards the centre of the earth, its velocity again increasing till it had passed the centre, and these oscillations would proceed, getting shorter and shorter each time, until, ultimately, the stone would remain suspended at the centre of the earth; the quantity of matter above being then equal to the quantity below, the attracting power of the earth's mass on either side would consequently be evenly balanced.

217. What is "judges' bread"?

When the judges of assize go on circuit to Leeds, they are supplied with a superior quality of bread, not obtainable at any other time in the town. It is called "judges' bread." The oldest English ordinance regarding bread is of the reign of John, A.D. 1203. Other statutes on the subject were passed in successive reigns, down to that of Anne, in 1710, when the severe Act of Parliament of Henry III., 1266, was repealed. This Act was entitled the "Pillory and Tumbrel." According to it a baker whose bread was found defaulting was dragged on a hurdle from the Guildhall through the dirtiest streets to his own house, with the faulty loaf hanging round his neck. For a second offence he was in addition placed in the pillory for at least an hour; and, if a third time convicted, besides being dragged again on the hurdle, his oven was pulled down, and himself made to forswear that trade in the City for ever. Even till 1822 an Act of Parliament regulated the price in the City of London, and till 1836 in the rest of the country.

218. Who was the last male actor in this country who regularly acted female parts?

The last male actor of note who regularly took female parts on the English stage was Richard Kynaston, in the reign of Charles II. He first appeared as Desdemona, and then enacted the part of Juliet to Betterton's Romeo. An amusing anecdote is told of him when, under Davenant's management, the King went to see him act. His Majesty expressed impatience at the delay in the raising of the curtain. "Sire," said the manager, "the scene will commence as soon as the queen is shaved." Kynaston that night was to play the queen. Of course, Kynaston did not stand alone as a personator of female characters. Burt, Clun, Goffe, John Wright, and others divided the honours with him, but he survived most of his contemporaries of note, and retained his reputation until he was ultimately superseded by actresses who always played female parts.

219. How much money is spent every year on shaving in this country?

According to the 1891 census, there were in the United Kingdom 18,319,157 males of all ages, of whom between 7,000,000 and 8,000,000 form the shaving community, the remainder being either too young or preferring to go unshaved. The shaving population consists of three classes, namely, those who shave themselves, but still have to pay for purchase or renewal of razors, strops, etc.; those, like the working-classes, who, forming a large majority of the whole, only go to the barber once or twice a week; and those who are shaved daily. The charges range from 1d. to double, treble, and even six times that amount, but, in the case of the higher charges, yearly subscriptions are frequently available, which reduce the cost considerably. Taking all these various circumstances into consideration, the average yearly expenditure on shaving in this country will be between £1,500,000 and £2,000,000.

220. Where is the largest artificial cistern in the world?

This is situate at Constantinople, and is known as the Yèrè-Batan-Serai. The approach to this immense subterranean cistern is through a Turkish house. After entering it, a visitor passes through the entrance-hall into a courtyard, and, descending a steep slope of slippery earth, finds himself at the opening of the dim and mysterious Palace of Waters. The roof of this monster cistern is supported by marble columns, distant about 10ft. from each other, every one formed from a single block; the capitals are elaborately wrought, and in

one instance at least the entire pillar is covered with sculptured ornaments. Two attempts have been made to explore it, both by Englishmen, but neither succeeded in ascertaining its full extent. All that is known is that it occupies a space of many square miles beneath the city. In the first attempted exploration, the explorer and his boatman never returned, and it is presumed got bewildered amongst the columns, and, being unable to retrace their way, perished by famine. In the case of the second explorer, he proceeded alone (no one being found willing to accompany him), having first fixed two lighted torches to the stern of his boat, and tied one end of a quantity of strong twine to one of the pillars near the entrance, leaving it to unwind itself from a wheel as he went along. The flame of his torches gradually faded from view, and the fourth hour from his departure had expired when a faint gleam of light once more appeared in the distance, to the great relief of the watchers for his return. Shortly the wanderer landed from his boat, chilled and exhausted, and stated he had gone on for two hours in a straight line, but had seen nothing but the vaulted roof overhead, the water beneath him, and long avenues of columns stretching around him in all directions, and losing themselves in the darkness.

221. Who owns the biggest kite ever made?

A Japanese gentleman owns a kite 50ft. by 45ft., which required 5,800 sheets of paper and 350 pieces of wood for its construction. The weight, including tail, is upwards of 1,700lb., or more than three-quarters of a ton. M. Maillot, a member of the French Society of Aerial Navigation, owns a kite of octagonal shape, which has a superficial area of eighty-five square yards. The largest kite ever made in this country was one owned by Mr. George Pocock, of Bristol (grandfather of the well-known cricket champion, W. G. Grace), for the purpose of drawing a carriage along the roads. It was 12ft. by 15ft., and proved the feasibility of such a mode of conveyance. Mr. Maxim, the inventor of the well-known quick-firing gun, has made a steam kite, 13ft. long by 4ft. wide, which is propelled through the air by a light screw, making 2,500 revolutions a minute. When properly inclined and the screw going at a certain speed, the kite moves horizontally; when the screw turns faster, it ascends; and when slower, it descends. The largest kite ever made in the United States is that produced in Durham, Greene County, New York, about three years ago. The frame consisted of two main sticks 28ft. long, weighing each 100lb., and two cross sticks 21ft. long, and

weighing 75lb. each; all of these sticks were 2in. by 6in. in dimensions. Over the frame-work was stretched a great sheet of white duck 25ft. by 18ft., and weighing 55lb. The tail of the kite alone weighed 50lb. and contained 155yds. of muslin. Twenty-five hundred feet of half-inch rope served as "kite-strings." This plaything cost £20, and when it mounted into the air it exerted a lifting power of 500lb. Six men once permitted it to ascend 1,000ft. Another made in New Haven, Connecticut, is 12ft. across and 15ft. high, covered with red cambric. Twelve hundred feet of Manilla cord is used in "raising" it. This is run from a great reel, about the size of a steering wheel of a steamer. It requires two men to turn the cranks, which it is stated will bear two tons pressure.

222. Why do musicians tune their instruments after, instead of before, coming into the orchestra?

It is a mistake to imagine there is no tuning of the instruments before coming into the orchestra. Violinists, double bass players, and violas (if professionals or good amateurs) keep their instruments, as a rule, up to concert pitch, the difference of temperature, the loosening of a peg, or variation in the tension of the strings necessitating another tuning when in the orchestra. Strings of catgut are materially affected by moisture, which swells them laterally and tends to shorten them. Damp heat sharpens the strings, while dry heat flattens them. Concert rooms, according to the state of the weather, experience both conditions. Hence so much tuning as soon as in the orchestra is necessary to get the instruments accustomed to the temperature of the room. Wood wind instruments, such as oboes, clarionets, and bassoons, sharpen from the swelling of the wood by the warm, moist breath of the performer. Brass instruments also sharpen by the heat of the performer's breath.

223. Has there ever been a white nigger?

Solomon Tenry, who is known as the "White Nigger" of Castan's Panopticum, at Berlin, was born at Sierra Leone, of black parents, and is now twenty-four years of age. Although possessing features of the negro type, his skin is white, and his crisp, curly, and abundant hair yellow as straw. Solomon is the only white child of his parents, the other members of the family being black like themselves. Another case is that of two negroes (father and son), living within a few miles of Madison, U.S.A., who had gradually changed from the sable hue of the African race to that of the white. The younger negro first cast off his dusky skin, and became as white as

anyone so born, and then the change of colour occurred with the father. The Leucothiopes, or white negroes, are so common that they were, at one time, considered to be a distinct race; but closer observation having since shown that the same phenomenon occurs in individuals of other nations, that idea has long been discarded. White niggers are not more rare than are albinos among other nationalities, and may be simply regarded as freaks of Nature. The peculiarity is attributable to the absence of colouring matter which, in the normal state, is secreted between the cuticle and the true skin, and also of the dark pigment of the eye, so that the skin has a pale, sickly-white colour, while the iris of the eye appears red, from its great vascularity. Darwin mentions that Dr. Rohlfs informed him that he had often seen in Africa the offspring of negroes either completely black, completely white, or even piebald.

224. Where is there a woman's boating eight?

At a woman's college in Boston, in the United States of America, there is a boating "eight," composed only of girl students. The fair oarswomen are muscular as well as pretty, and they swing the 10-foot oars with a strength that removes any doubt of their ability to pull a good stroke. A ladies' boat-race formed one of the chief features at a regatta at Gibraltar in the spring of 1890. The ladies rowed in paired-oared skiffs, coxswained by midshipmen, four crews entering for the contest. There is a boating eight, named "The Ladies' Club," in connection with the family of Mr. Hammersley, Abney House, Bourne End, near Maidenhead. It is well known on the Thames for many miles round. Men are not absolutely excluded from rowing in the boat, but women are the chief and conspicuous performers. At Portobello, near Edinburgh, a very strong ladies' rowing club has existed for some years, and amongst their boats are two eight-oared ones, which regularly compete in matches every summer.

225. Which is considered the most costly breed of horses?

There can no longer be any doubt as to the most costly breed of horses in the world, for in the spring of 1892, Mr. J. Malcolm Forbes, a citizen of Boston, in Massachusetts, purchased for the enormous sum of $135,000—equivalent to 27,000 guineas—a trotter named Aryan, who had done his mile as a two-year-old in 2min. 10¼sec. This peerless horse was bred by Governor Stanford, who owns two immense stud-

farms in California, and is said to divide with Mr. Casey, of Buenos Ayres, the reputation of being the largest raiser of equine stock in the world. The sire of Aryan—Electioneer—is Governor Stanford's favourite trotter stallion, and his progeny are in great request in all the States and territories bordering on the Pacific. It is claimed by such enterprising breeders of horses of all descriptions as Governor Stanford and Mr. J. B. Haggin, that the air, herbage, and water of California are better adapted to stock-raising purposes than those of any other portion of the Old or New World. William Youatt, in his book on the Horse, states that the horses of Nubia or Dongola, in Africa, are the most perfect in the world. One was sold at Cairo, in 1816, for a sum equivalent to £1,000. Of special racehorses, O'Kelly paid altogether 1,137 guineas for Eclipse, who was never beaten nor paid forfeit, won for his owner on the turf more than £25,000, and was the sire of 334 winners, who netted to their owners more than £160,000, exclusive of plates and cups, and O'Kelly still refused to sell him for less than £25,000. Axtell, who trotted a mile in 2min. 12sec., was sold for £21,900. Ormonde was sold for £20,000, and £10,000 was offered and refused for an American trotting stallion.

226. Has a dinner-party ever been held inside an organ swell-box?

Such an entertainment is said to have been given in the largest organ in the world. This was built by Messrs. Hill and Son, and is in the Town Hall at Sydney. The internal width of this instrument is 80ft., with a depth of 20ft. It contains 126 speaking stops, distributed between five manuals, took three years to build, and cost £15,000. The most remarkable feature of this organ was its 64ft. stop, a striking reed of true length on the pedal organ. In the "Reminiscences of Dr. Spark," the Leeds organist, there is a curious story of a dinner-party given in 1858 in the swell-box of the Leeds Festival organ. The swell-box held ten people—J. W. Davison, Henry Smart, and Howard Glover being the life and soul of the company. The menu consisted of a fine salmon, some choice *entrées* from Gunter's, a haunch of venison, a dozen of champagne, and six bottles of 1834 port.

227. Which church steeple has been utilized as a lighthouse?

The steeple, or "stump," as it is locally called, of the parish church of St. Botolph, at Boston, on the south-east coast of Lincolnshire, near the Wash, has long being utilized as a light-

house. The tower is 290ft. in height, and resembles that of Antwerp Cathedral, and it is crowned by a beautiful octagonal lantern. This tower being visible forty miles away, it serves as a lighthouse to guide mariners when entering what are called the Boston and Lynn Deeps. The church is one of the largest without aisles in the kingdom, being 290ft. long by 98ft. wide within the walls. The church contains: steps to tower, 365, corresponding with days in a year; windows, 52, corresponding with weeks in a year; pillars, 12, corresponding with months in a year; doors, 7, corresponding with days in a week; steps to library, 24, corresponding with hours in a day; stairs to chancel, 60 each, corresponding with seconds in minute and minutes in hour. An iron beacon or firepot could till lately be seen standing upon the tower of Monken Hadley, near Barnet, in Middlesex. It is supposed to have been intended as a signal-light to benighted monks and others. The last occasion on which it was used was in an illumination at the marriage of the Prince of Wales. The Church at St. Buryan, near the Land's End, Cornwall, one of the loftiest towers in the country, stands 519ft. above the sea, and the tower was formerly used as a lighthouse. This light was seen plainly at the Scilly Isles, a distance of over twenty-six miles. The tower at St. Michael's Mount, Penzance, was also used as a lighthouse, and has what is called the Lantern Tower.

228. Is there any church clock that strikes the hour twice?

Such is the case with the clock in the tower of St. Clement Danes Church, in the Strand, London. The hour is struck once on the large bell, weighing 24cwt., and also on the Sanctus—a bell in the spire which dates back to the fifteenth century, and is said to be one of the bells used before the Reformation. It was in this church that the famous Dr. Johnson regularly attended; a brass plate marks the pew—No. 18 in the north gallery—which was occupied by him. The celebrated clock in Strassburg Cathedral also strikes the hour twice.

229. Where is the finest collection of carved oak furniture in England?

The only collection of oak furniture in England which the 'Builder' thought worthy of mention from 1872 to 1892 inclusive is that of the Oak Room in the offices of the New River Company, at Clerkenwell. It is the room in which the meetings of the proprietors of the New River Waterworks are held. The house in which it is situated was built in 1613, and repaired and refronted in 1782. The carving in the room is

attributed to Grinling Gibbons, the celebrated wood artist, who died in 1721. The ceiling, wainscotting, and chimney-piece are all of the most perfect workmanship, and all the chairs and tables are appropriate. This company can well afford such a costly apartment. Its called-up capital is indeed but three and a half millions; but, founded in 1619, probably the oldest sharehold company in England, its shares have long been precious heritages, and though nominally for £100, the selling price, if one can be bought at all, is £123,000. Other work of Grinling Gibbons is at Petworth, in Sussex, the seat of Lord Leconfield, whose father was the natural son and adopted heir of the third Earl of Egremont, and was raised to the peerage; one room there being considered among the artist's chief performances. At Chatsworth, the famous Derbyshire seat of the Duke of Devonshire, there is a great deal of his work, and though it is chiefly ornamental, such as foliage, flowers, feathers, it is of exquisite delicacy and truth. Other specimens of his workmanship are the embellishments of an entire gallery at Southwick Park, near Fareham, in Hampshire, the seat of Mr. Thomas Thistlethwayte.

230. Has any person in this country been buried on a house-top?

There is a house near the Marble Arch, London, on which is a glass dome. Through this dome can be seen a large oblong box, painted black, which has the appearance of a coffin. The story is that the owner, who was also the tenant of the house, made a provision in his will that his body should not be buried, but should be placed in a coffin inside the glass dome, where it is now said to remain. The father of one of the largest property owners in London is said to have been buried in a like manner on the top of one of the finest buildings in the City. It is doubtful whether either of these two instances has been sufficiently verified as to be conclusively proved. A coffin rests on the rafters of the roof of the stable of the Old Castle Inn, at Stevenage, containing the body of Henry Trigg, who, during his life, owned and occupied the inn.

231. Has any work in a cathedral in this country been executed by convict labour?

The mosaic work with which a large portion of the crypt of St. Paul's Cathedral, in the City of London, is paved, was made by the female convicts of Woking prison. The whole of the crypt will, in course of time, be covered in the same way.

The quarries of the Isle of Portland, in Dorsetshire, supplied the materials for St. Paul's Cathedral, and for all the most splendid buildings in London, about 70,000 tons of Portland stone being now raised from these quarries annually. All the quarries of the island, which number about 100, are Crown property, but, except where the stone is taken for Government purposes, are leased to various firms, who pay a royalty on every ton. The convict prison, with its cells for 1,500 prisoners, was erected only in 1848. Therefore, though the convicts quarried the stone for the great Portland breakwater, which is two miles in length and between fifty and sixty feet deep in the sea, as well as for many other immense public works on the island and elsewhere, they, of course, did not help in this way to build St. Paul's, but may have largely assisted in its repairs. They not only quarry stone, but dress it; make bricks, saw wood, and iron is cast, forged, and wrought by them; only one article for erecting convict prisons not being made by them, and that is locks. The Cathedral of St. David's, in Hobart, Tasmania, a noble pile of buildings on an eminence overlooking the city, was entirely constructed by convict labour.

232. Which are the northernmost and most southerly towns in the world?

Hammerfest, in Norway, the rendezvous of the fishing fleets of the Kara Sea and the waters along the Spitzbergen coasts, is the northernmost town in the world, being situated well within the Arctic Circle. It is a great cod-fishing station, and one of its industries is the preparation of cod-liver oil. Punta Arenas, situated at nearly the foot of South America, in the Magellanes territory of Chili, is the most southerly town in the world. The island of Spitzbergen is nearer the North Pole than Hammerfest, but contains no town, although it is visited by fishermen and others during the fishing season, numbers of them remaining there for a month or two at a time. Parts of the island of Tierra-del-Fuego are further south than Punta Arenas, and are occupied by a race of savages; but no town exists south of Punta Arenas or north of Hammerfest.

233. What is the most curious material out of which a model of a ship has been made?

Beef bones; a model of H.M.S. *Victory* having been made out of that material by the French prisoners of war while confined at Portsmouth in 1805. The model was exhibited some time ago at the Jerusalem Shipping Exchange, the

directors having allowed it to be placed in their exchange room. It was the property of the late W. B. Head, formerly a shipbroker in London. He had relatives in the Navy, one being master of H.M.S. *Bellerophon*, at the Battle of Trafalgar, where he was killed in the heat of the action, and another was flag-lieutenant of H.M.S. *Victory* in 1812. The model was, after the death of Mr. Head, purchased by subscription, to be presented to the Greenwich College Museum, the proceeds being applied for the benefit of the son and daughter of the deceased.

234. What was the greatest number of people killed in a railway accident in this country?

Seventy-eight—that number having been killed in the accident which occurred on the 12th June, 1889, at Killooney, near Armagh, on the Great Northern Railway of Ireland, to a Sunday-school children's excursion on its way to Warren Point, a pretty watering-place on the shores of Carlingford Lough. In this accident there were 400 persons injured. The next most disastrous event was the Tay Bridge disaster, December 28th, 1879, when seventy-four persons met their death. Another at Shipton, December 24th, 1874, caused the loss of thirty-four lives and injured seventy. Equally fatal with the Shipton accident in actual loss of life was the horrible accident at Abergele, in Wales, on the Chester and Holyhead branch of the London and North-Western Railway, on August 20th, 1868, when an express train ran into a van containing petroleum, and the oil being ignited, thirty-four, or as some say thirty-three, persons were burned to death, but their bodies were so consumed that only one could be properly identified at the inquest. At Thorpe, near Norwich, on the 10th September, 1874, twenty-six lives were lost and fifty injured by a collision. On the 25th August, 1861, the Clayton Tunnel collision caused the death of twenty-three and injury to 176 persons.

235. Do any of the fish species proceed through the water with scouts and sentries, like an army on the march?

This is the case with a species of mullet found abundantly in the South Pacific Ocean. These fishes swim in shoals of several hundreds together, and, like troops on the march, have officers, pioneers, a skirmish line on each flank, and a rear guard, but no stragglers, as sometimes occurs in the case of long and heavy army marches. Three leading fish swim slowly on, each alert for any danger on his particular plane;

a similar group are a few feet away, and a third still farther distant. A few fathoms in the rear will be seen the solid shoal of fish swimming along unconcernedly, with perfect confidence in the watchfulness of their scouts. Similar parties of threes are detached on each flank and in the rear, while above and below the main army are single fish deployed at regular distances. If an overhead scout sinks to the main body, they at once move downward to a level of greater safety, or if a lower scout swims upwards, the obedient shoal rises nearer the surface till the peril is past. When the shoal is about to enter a basin in the coral, their chosen feeding-ground, the main body halt at the entrance. The flanking parties set out right and left about the inclosed water, leaving three sentinels at every opening upon the broader sea without. These scouts swim across the basin in every direction, until satisfied that it is free from danger. The great body of the fish then enter and scatter to feed upon the bottom. Soon some of the fish feeding at the bottom leave the others, apparently in response to some signal. By threes they swim to the several passages to relieve the pickets, and others rise to the surface to take the place of those on duty there. No matter how long the shoal may remain in its feeding-place the precautions are never relaxed, and twice or thrice an hour the guards are relieved in the orderly fashion of a disciplined army.

236. Have photographs under the sea ever been taken?

Within the last few years by the Prince of Monaco, who has devoted himself to the work of sea-exploration. His yacht, the *Princess Alice*, is equipped with all the latest appliances for scientific research on and in the ocean. Dr. Neumayer, in 1874, presented to the Geographical Society of Berlin a remarkable photographic apparatus for determining the temperature and direction-current at any particular depth in the ocean. In a brass box, hermetically sealed, and having attached to it an apparatus resembling a vane or rudder, is a thermometer and a magnetic needle, behind each of which is placed sensitive photographic paper, and in front of each is a small nitrogen vacuum tube. The box also contains a small induction coil. When the apparatus is lowered to the required depth, the rudder causes it to take a direction parallel to the current there existing, and hence a definite direction with reference to the needle within. The thermometer soon acquires the temperature of the water outside and becomes stationary. At this instant an electric current is sent to the box, which, by means of the induction coil inside, lights up the little nitrogen tube,

the violet light of which, photographically very intense, prints in about three minutes the position of the needle and the height of the mercury column upon the prepared paper. The current is then intermitted, the apparatus raised, the photographic tracing fixed, examined, and placed on record. Two Scotch photographers have devised an apparatus for taking photographs under the water, and have produced several submarine pictures of the bottom of the sea in the Firth of Clyde, near Gourock. The camera is inclosed in a water-tight case, and fixed to a loaded tripod, which is lowered into the water. When the latter has reached its position on the bottom, the camera cover is withdrawn by means of a pull-cord.

237. How can wood be rendered incombustible?

The following three methods will render wood more or less incombustible. First: Deal boards become almost incombustible when painted over with a diluted solution of water-glass or silicate of soda. The water-glass is usually sold as a thick fluid, like honey. This may be thinned with soft water, or boiled water will do, of about six or seven times its own bulk, and the solution must be applied warm. In about twenty-four hours another coat must be applied, and perhaps a third. A new brush should be used, and be washed in clean water after using, or it will become too soft. The boards must be free from grease or fat when painted. A second method is to soak the wood in a strong solution of alum and sulphate of copper; about 1lb. of each being sufficient for 100 gallons of water. These substances must be dissolved in a small quantity of hot water, and then mixed with the water in which the wood is to be steeped. The timber must be kept under the fluid by stones, or any other method of sinking it, for about four or five days. When taken out, it must be allowed to dry thoroughly before being used. A third plan for rendering wood partially fire-proof is to whitewash it two or three times.

238. Has a cargo of cats ever been brought into this country?

In the early part of 1890 a cargo of cats arrived in this country from Egypt, having been shipped by a merchant in Alexandria to a merchant in Liverpool. This cargo consisted of twenty tons of cats, being the remains of 180,000 of the sacred Egyptian cats, every one of which at the time of its decease had been deemed worthy of special embalment into a mummy and honourable sepulture, according to the rites of the ancient cities in that country. These mummified

cats are supposed to have lived some thousands of years before Christ, and to have been buried, for close upon 4,000 years in the cat cemetery at Beni Hassan. They were accidentally discovered by a fellah husbandman, in 1889, by the ground on which he was working falling in, and disclosing an immense subterranean cave in which they were found. This cave was tenanted by untold legions of cats, all sedulously embalmed and swaddled in cloth cerements. A second consignment weighed nine tons. There was brisk competition when the cargo was sold by auction. Heads brought as much as 4s. 6d. each ; body without head, 5s. 6d. ; while the bulk averaged £5 17s. 6d. per ton.

239. Which country in Europe has the most donkeys?

There are vastly more donkeys in Spain and Portugal than in any other country of Europe. Famous for their beauty, as were for centuries Andalusian horses, the only animals belonging to Spain still noted for their excellence are mules and asses, which are recognised as the best to be found anywhere. There, as in Italy and Malta, the ass is carefully bred, and has thus been greatly improved. No less than £200, it is said, is sometimes paid in Spain for a male ass. The following is the result of a count made some years ago of the actual number of asses in different countries of Europe, and of the number that there are for every thousand of the population :—

	No.	Per 1,000 inhabitants.
Spain and Portugal	2,510,000	125
Greece	94,000	55
Italy	501,600	17
France	406,800	11
United Kingdom	337,000	10
Austria	96,000	3
Belgium and Holland	15,000	2
Germany	40,000	1

In Egypt there were 88,000, or 18 for every 1,000 persons. The number increased in the United Kingdom, from 130,000 in Great Britain and 141,000 in Ireland, or 271,000 in all, in 1850, to 150,000 in Great Britain and 187,000 in Ireland, or a total of 337,000 for the year 1880.

240. In what part of the world are medicine bottles worshipped?

This occurred in Burmah. A lady missionary in that country, some time ago, gave Dr. A. J. Gordon the following account of how she was the innocent cause of this peculiar mode of worship having been instituted. In one of her tours she came upon a village where cholera was raging. Having

with her a quantity of a famous pain-killer, she went from house to house administering the remedy to those attacked, and left a number of bottles to be used after she had gone. Returning to the village some months subsequently, she was met by the head man of the community, who cheered and delighted her by this intelligence: "Teacher, we have come over to your side; the medicine did us so much good that we have accepted your god." Overjoyed at this news, she was conducted to the house of her informant, who, opening a room, showed her the pain-killer bottles solemnly arranged in a row upon the shelf, and before them the whole company immediately prostrated themselves in worship.

241. Which vegetable contains the greatest number of medicinal properties?

Medical authorities differ very considerably on this point, and plants, like lettuce, for instance, may at one time be highly valued for supposed medicinal properties, and subsequently be generally set aside as comparatively valueless. Taking vegetables, as commonly understood, sage and rhubarb would probably take first rank. The leaves and flowering parts of the sage plant, infused as tea, are tonic and astringent. Sage-tea with honey is a valuable gargle in cases of inflammation of the throat and relaxation of the uvula. The oil of sage is used in liniments against rheumatism. It is an excellent tonic and corrective of the liver and kidneys, is a diuretic, and its leaves make a good poultice for healing sores. Rhubarb is a cathartic, an astringent, and a tonic, as well as a useful aperient. With reference to plants generally, the same difference of opinion exists. Yarrow, lobelia, camphor, and quinine stand highest in estimation. Preparations of the latter are very largely used both internally and externally. Lotions locally applied have a germicidal, antiputrefactive, and antifermentative action. It is a good tonic, and also of great value as an antipyretic and a prophylactic.

242. Does an addition of salt make a solution of sugar sweeter or the reverse?

On November 21st, 1892, there were several experiments by officials of the University Museum, Oxford, to test whether the addition of salt to a solution of sugar made it sweeter or the reverse. First of all, one ounce of pounded white sugar was dissolved in hot water, and tasted, and then an ounce of salt was dropped gently in, which sank to the bottom and, of course, absorbed some of the water, while it was doubted whether it would absorb sugar at the same time. The water

above the salt was then tasted, and was thought generally to be sweeter; but the quantity of salt was thought too large for the test to be reliable. Another ounce of sugar was therefore dissolved in warm water, and a pinch of salt dropped in and stirred in a glass containing part of the solution, which was tasted alternately with part of it in another glass without salt by three persons who knew what the difference was, and by three who did not. They were unanimous that the solution with the salt was the sweetest. The salt seemed to sharpen up the flavour of the sugar. This experiment has also been carried out by Professor Zuntz, who some time ago made a communication on the subject to the Physiological Society of Berlin.

243. What Englishman in recent times has become an Indian chief?

Mr. J. Graham Kerr, at the meeting of the British Association at Edinburgh in 1892, exhibited in the Anatomical Theatre of the New University Buildings in that city a collection of weapons, photographs, a fire-drill, articles of clothing, etc., used by the Toba Indians of the "Gran Chaco." The articles had been collected by Mr. Kerr when he accompanied the Pilcomayo Expedition in 1890–91. At the close of his description, which was brief and interesting, the lecturer received the cordial thanks of the section, and Professor Sir William Turner mentioned that Mr. Kerr was now a chief of the Toba Indians, and that the natives had treated him most kindly throughout his long and adventurous journey. On October 1st, 1869, Prince Arthur, son of Queen Victoria, and now Duke of Connaught, in travelling through Canada, having visited the villages of the Indians, was selected by them Chief of the "Six Nations." These were the Iroquois Indians, composed originally of five tribes, known as Mohawks, Oneidas, Onondagas, Senecas, and Cayugas—a powerful and celebrated confederation.

244. Does punishment by torture still exist in any civilized country?

The Chinese make use of torture in their courts of justice; the kind most commonly inflicted being flogging. The obdurate witness is laid flat on his face, and the executioner delivers his blows on the upper part of the thigh with the concave side of a split bamboo, the sharp edges of which mutilate the sufferer terribly. The punishment continues until the man either supplies the evidence required or becomes insensible. Numberless

other forms of torture are occasionally resorted to, such as tying the witness up to a beam by his thumbs and big toes, squeezing his fingers between pieces of bamboo, etc., and these, of course, vary both in kind and severity according to the disposition of the presiding mandarin. The slow death of stabbing is also inflicted for the crimes of treason, parricide, and incest. Securely tied to a post, the head of the condemned convict is placed in a kind of pillory, while the magistrate delegated to witness the execution of the sentence draws from a covered basket a knife, on the handle of which is written the part of the body in which it is to be inserted. This horrible torture is continued until chance selects the heart or some other vital part. The torture of the "Turkish bath" is one of the devices of the American police for extracting confessions from suspected criminals. In Russia the knout is still popular, while in Turkey the bastinado torture prevails. In Persia a common form of punishment is burying alive with the head left above ground, exposed to the sun and attacks of birds and insects.

245. Who was the first professional actress in this country?

Prynne denounced the attempt made in 1629 to introduce, according to Continental custom, French women at the Blackfriars Theatre. This was the first appearance of professional females on the English stage. They were, however, foreigners. In a performance of "Othello," on December 8th, 1660, there was a prologue by one "J. Jordan," which he professes was written to introduce the first English woman that came to act on the stage—Mrs. Anne Marshall—who was the leading lady of the company, and is considered the first professional English actress in this country. A claim has been made for Mrs. Coleman, who took the part of Ianthe in Sir W. Davenant's "Siege of Rhodes," in 1656. On January 3rd, 1661, we find Pepys at the theatre, witnessing the "Beggars' Bush," which he first saw performed by men only, and then by women. Here he adds: "The first time I ever saw women come upon the stage." On his next going, he saw Beaumont and Fletcher's "Scornful Lady" done by a woman, which, as he thought, added greatly to the effect.

246. How many schools of science and art are there in the United Kingdom?

According to the thirty-ninth report of the Department of Science and Art of the Committee of Council on Education, there were 2,164 schools, 8,568 classes, and 148,408 pupils

under instruction. Of these pupils 144,985 came within the category of those on account of whose instruction payments on the results of examinations are made by the Department. Of the schools 1,614 were in England and Wales, 324 in Scotland, and 226 in Ireland. The number of students for examination was 90,812, or an increase of 7,742 on the previous year. Besides these, 2,847 self-taught students and pupils presented themselves for examination. The number of examination papers worked by the 93,659 students examined was 179,549, or an average of very nearly two papers per student; 72,463 students were successful in passing in one or more subjects, and of these 37,333 for the first time. In the previous year 71,417 were successful, and 37,614 for the first time. The payments on results, exclusive of sums paid to training colleges, amounted to £102,181. In 1886 there were 1,682 schools, of which 1,259 were in England and Wales, 226 in Scotland, and 197 in Ireland; while in 1881 the number of schools was 1,355.

247. What bird keeps its young a year in the nest?

This is a peculiarity of the condor, the largest of the vulture species. The young are unable to fly for a whole year, requiring that lengthy period of time in which to develop the immense strength and power of flight to which they attain when full grown. During the first twelve months of their existence the old birds have therefore to attend to the wants of their young ones, which remain in the nest until they attain their full power of flight and can seek their own prey. The condors have their central home in the Andes, and their nests, which are very roughly put together, are placed at such heights as to be almost inaccessible to man. These birds soar to immense heights, until in fact they are lost to view in or far above the clouds.

248. What is the greatest area of land covered by a single tree?

Nearly seven acres. One of the largest banyan trees known to exist has been discovered on one of the Howe Islands, 300 miles from Port Macquarie, in Australia, and the space it covers is nearly seven acres. Five acres is the area covered by a banyan tree growing on the banks of the River Narbudda, in the Province of Guzerat, India. It is distinguished by the name of Cubbeer Burr, which was given it in honour of a famous saint. High floods have at various times swept away parts of this extraordinary tree, but what remains is nearly 2,000ft. in circumference, measured round the principal stems; the overhanging branches not yet struck down cover a much

larger space. The large trunks of this tree amount to 350, and the smaller ones exceed 3,000, every one of which is constantly sending forth branches and hanging roots to form other trunks. It is said that 7,000 persons find ample room to repose under its shade. What is reputed to be the largest tree in the world is situated in Muscoli, near the foot of Mount Ætna, and is called the "Chestnut Tree of a Hundred Horses," and is, moreover, believed to be one of the oldest trees in the world. Five enormous branches arise from one great trunk, which is 212ft. in circumference. A part of the trunk has been broken away, its interior being hollow, and large enough to contain a flock of sheep, or two carriages can be driven abreast through it. Colonel William Henry Sykes mentions a banyan tree which he saw at the village of Mhow, in the Poona district of the Bombay Presidency. It had sixty-eight descending stems, and constituted a grove capable, when the sun was vertical, of affording shade to 20,000 men.

249. What has been the largest litter of pups on record?

Some twenty-seven years ago it is recorded that a St. Bernard bitch, belonging to a Mr. Soliague, of Barking, had twenty-one pups at one litter—they were very weakly, and all died within a few days of their birth. It was also noted in the 'Standard' some time ago that a retriever bitch had seventeen puppies in a litter—all of which were strong and healthy; on another occasion she had sixteen. An Irish setter bitch once had seventeen pups; while litters of twelve, eleven, ten, and nine are not at all uncommon.

250. How many dress suits are lent out in London every night?

These are estimated to average throughout the year between 1,500 and 2,000 nightly, at prices ranging from 5s. to 21s. per suit per night. Of course it varies with seasons, and can never be ascertained with absolute accuracy. The hiring system has of late years extended in every direction, and to almost every incident in life. It includes not only dress suits, but wedding dresses and outfits, fancy as well as ordinary dresses and uniforms, besides dresses for every occasion, from a christening to a coronation. All can be hired for the day or the evening. It does not stop at dresses, but the individuals to wear them can also be hired, should occasion arise.

251. What is the highest price ever paid for a pigeon?

A hundred and fifty pounds was given in 1891 for the winner of the Concours National, of Belgium, which won a

race of 500 miles, in which 3,000 carrier pigeons took part. At the Crystal Palace show in 1891, Miss Calcroft bought two carrier pigeons for £200 the pair. Mr. Stephen Salter, formerly of Oxford, sold an owl pigeon to Mr. Sydney Brunton for £100. Writing on November 26th, 1892, Mr. A. Lubbock says: "I have known cases of £50 and upwards being refused for a winner of races; and no wonder, for a really good bird may possibly win as much as £700 or £800 in a year, and in addition may produce others as good or better." The amount of money invested in breeding-stock is large. It is by no means rare for a breeder to have £500 or £1,000 in his pigeons. It has been computed that at some of the great shows, notably that held annually at the Crystal Palace, the actual value of the pigeons reaches, if it does not exceed, £10,000. One breeder in fifteen years made a competency of about £5,000 entirely out of pigeons, he being one of the most skilful fanciers of the day.

252. What is the shortest title ever given to a novel?

The shortest title ever given to a novel was "B"—sub-title "An Autobiography"—by E. Dyne Denton, in three volumes. Whyte Melville, in 1869, published a novel to which he gave as a title the alternative letters "M or N," a term well known to every student of the Church of England Catechism. The following novels have short titles, each consisting of one word of three letters, namely: "Leo" (1864), by Dutton Cook; "May" (1873), by Mrs. Oliphant; "Jet" (1878), by Mrs. Edwardes; "She" (1887), by Rider Haggard. The following short-titled novels appear in Mudie's list for December, 1892: "Bis," by E. Gerard; "Eve," by Author of "John Herring"; "Isa"; "Fan," by Henry Harford; "Lil," by Author of "Tipcat"; "Tay," by Rev. W. O. Peile; "Tim"; "Ulu," by J. Thomas and Miss H. Smith. An American novel has been published with the title "?".

253. Which animal's skin is most expensive?

A skin of the sea-otter has been sold for as much as £155. Sable skins, little bigger than a man's hand, have been sold for £20 each, which is proportionately more expensive than the skin of the sea-otter. A mantle of this valuable sable fur was a gift to the Empress of Russia on her coronation, by the town of Vikoutsk in that country. It weighed 16oz., and is valued at £12,000. The skin of an elephant, when tanned, is very expensive, the tanning taking about six months. Articles made from elephant hides are costly luxuries. Cigar-cases, card-cases, and similar small articles vary from £5 to £20; a

small pocket-book, without gold or silver ornamentation, brings about £8; while a small satchel made of the same leather costs from £60 to £80. The skin of a silver fox, otherwise called a black fox, varies in price from £10 to £40. The whole number obtained annually amounts to only 2,000, of which about 1,600 are imported into England. La Hontan states that in his time a skin of the silver fox was worth its weight in gold, and an unusually fine skin has been sold in the London market for £50. Of the specie of marten which is distinguished as the Russian sable, the darkest skins command £30 each. Inferior skins of the same animal fetch as little as from 4s. to 8s. A skin of the tiger of North China, which has hair from two to three inches long, and frequently measures from ten to fourteen feet in length, is valued at from £10 to £20. Amongst expensive furs, Mrs. Mackay owns a set of black fox which cost £2,800. The Princess of Wales is credited with having the finest and most valuable set of furs in this country. The Duchess of Edinburgh also inherits a very rare and valuable set from her mother, the late Empress of Russia.

254. How does a horse express its grief?

A horse not only sheds tears under the emotion of grief, but in moments of sudden or intolerable anguish utters a most melancholy cry. In one of Cooper's Indian novels dramatic use is made of the scream of a wounded horse, and Lord Erskine, in a speech made in the House of Lords upon the Bill for enforcing humanity towards animals, noticed this remarkable fact. An eye-witness relates the following: "On the advance to the heights of Alma, a battery of artillery became exposed to the fire of a concealed Russian battery, and in the course of a few minutes it was nearly destroyed, men and horses killed and wounded, guns dismounted, and limbers broken. On passing this wreck shortly afterwards I observed a single horse still attached and unhurt. By its side on the ground lay its late master, quite dead. The poor brute had turned round as far as possible towards him, with its head to the ground smelling the body, and there were copious tears flowing from its eyes. It looked so like a human being in dire distress that I could not forget the sad expression for several days."

255. Which stone is most durable for building purposes?

Professor J. A. Ewing gives the following figures as representing the comparative strength of building materials: Granite, 2½ to 5; limestone, 2 to 2½; sandstone, 1 to 2½; slate, 1½ to 3; brick, ¼ to ¾. But as to endurance when exposed to

the atmosphere, while in some granites the felspar decomposes into china-clay, other varieties are remarkable for their extreme durability, as attested by the Pyramids and other monuments of ancient Egypt, the most ancient of which are at the lowest estimate 5,500 years old. The finest granite to be obtained in these islands is the Aberdeen varieties. The granite of Tyene, which is found plentifully in Upper Egypt, was extensively quarried 1,300 years B.C., and formed into obelisks, sarcophagi, columns, etc., which have lasted without injury down to the present day, but this is attributable to the favourable climate of that country. The next most durable stone is that obtained from the quarries of Craigleith, near Edinburgh. In the south of England, the Crown quarries of Portland produce the finest and most durable building material; most of the public buildings in London have been built with it. To meet the destructive effects of climate, such as damp, fog, and sulphurous-laden smoke, the use of concrete has much increased during late years. London uses about 70,000 tons of Portland stone annually.

256. Where is the biggest greenhouse in the world?

At Kew, in Surrey, where the famous Botanic Gardens, of world-wide reputation, have glasshouses of all temperatures, from that of the ordinary greenhouse or conservatory, to the temperature of the hothouse for the palms and other tropical plants. The palm-house, covering nearly an acre, was completed in 1848, and is of the following dimensions: Length, 362ft.; width at centre, 100ft.; and height, 66ft.; and is glazed with more than 45,000 square feet of sheet glass. A splendid view of the smaller specimens, which have been brought from all parts of the globe where palms and bamboos flourish, is obtained from a gallery which runs round the central portion of the building at a height of about 30ft. The interior of the structure is heated by six boilers, with which a system of hot-water piping is connected. The temperate-house, completed in 1861, is 212ft. long, 137ft. wide, and 60ft. high; two side octagons, 50ft. in diameter, and two wings, each 112ft. long, 62ft. wide, and 36ft. high; is built of iron and glass, and contains valuable trees and plants from temperate climates. Another greenhouse, 500ft. in length, has been added. There are a large number of smaller houses for this, the most valuable and extensive collection in the world. The largest private greenhouse in this country is that at Chatsworth, the seat of the Duke of Devonshire, which measures 300ft. by 145ft., and 65ft. in height, and covers nearly three-quarters of an acre.

257. Where are all the fowls white?

In the western part of French Guinea, where the fowls belonging to the Rucugenne tribe of Indians are all perfectly white, not a coloured feather being found among them. The natives have no tradition of a time when their ancestors had fowls of other colours, but the white chickens are probably explained by the fact that white feathers are the choicest ornaments among this people, and they will not wear feathers of any other colour. In fact, their hens are raised more for their feathers than for cooking purposes. It is supposed that a long time ago, when their ancestors chose white as their favourite colour, they gave the preference to those fowls which were nearest white, reserving the others for cooking, and by constantly breeding from fowls that were white, or nearly so, the present white breed was evolved. On the Crichel Estate, belonging to Lord Alington, there is a portion of it known as the "White Farm," upon which no animals but white ones are kept—the cattle, horses, dogs, poultry, peacocks, guinea-fowl, etc., are all white. It is also a well-known fact that all animals in the Polar regions, as well as in extremely cold latitudes, are all white in colour.

258. Where is there a lake of snow?

Between the Himalaya Mountains, which separate India from Tartary and Tibet, the snow collects in winter in lakes of great length and of enormous depth, causing the annual rising of the Indus and Ganges, as is the case with the Nile, the Jordan, and many other rivers in various parts of the world, when these snows melt through the increasing heat of spring and summer. Such a lake was seen in 1892 by a party, with Mr. Conway as leader, who were exploring the almost unknown glacier system on the northern slopes of the Karakoram Range, the western extension or terminus of the Himalayas, and the northernmost portion of India, in the region named Hindu-Kush. They traversed the Hispar Pass, ninety miles in length, the longest glacier pass in the world, for the first time on record. They left Nagar on June 27th, 1892, and crossed the summit of the pass on July 18th, from which they had a most superb view over a vast level lake of snow, some 300 square miles in area, surrounded by a ring of giant peaks. But the deep, steep gullies filled with snow, described by that greatest of scientific mountain climbers, Edward Whymper, in his "Travels Amongst the Great Andes of the Equator," may also fairly be called snow-lakes, though on a smaller scale. Professor Tyndall, in his "Forms of Water," describes the Mer de Glace, or Sea of Ice, near

Chamounix, in Savoy, the south-west corner of Switzerland, as resembling rather a sea of snow in its superficial appearance. "This is caused," he tells us, "by the breaking up of the surface by solar heat. When you pound transparent rock-salt into powder, it is as white as table-salt, and it is the minute fissuring of the surface of the glacier by the sun's rays that causes it to appear white. Within the glacier, the ice is transparent."

259. What amount of conscience money is received every year by the Chancellor of the Exchequer?

This varies considerably every year, the amount for the year ending 31st March, 1892, being £253 11s. 8d., while in 1890 it was £1,588 0s. 5d., and in 1885, the highest on record, it nearly reached £10,000. The first known payment of conscience money was on the 30th March, 1789, when £360 was carried to the credit of the public. The remittance of that sum to the Chancellor of the Exchequer was accompanied by a note, stating that a like amount had been wrongfully detained from the public Treasury. The sums received as conscience money for many years averaged about £6,000. These payments are by no means always voluntary, but on the contrary, are frequently sent under compulsion. When the Income Tax Commissioners find that a man has understated his income, they make him pay a certain sum supposed to be equal to the tax evaded. Instead, however, of inflicting the legal penalty, the Commissioners sometimes give the defaulter an opportunity of forwarding the amount to the Chancellor of the Exchequer as conscience money. Other departments of the Government, as, for instance, the Post Office, occasionally obtain payments of conscience money, and many large insurance companies receive similar remittances.

260. Where is the largest creamery in the world?

Near St. Albans, Vermont, in the United States. Twelve thousand cows, owned by 700 farmers, supply it with cream, and the average daily product is 10,000lb., or five tons, of butter. All cream received is tested in order to obtain a thorough knowledge of the amount of butter-fat in the average product of each farmer's dairy, and he is paid daily for the butter value he brings in. There are fifty-four stations for receiving the milk, and at these stations the cream is separated, and only the latter is sent on to the factory. They run a score of churns, each of which will turn off 500lb. of butter in one batch. The butter-working machines are four in number, and in a very few moments 80lb. can be properly worked and salted.

They use a cartload of salt every two months, and the factory employs sixty hands, besides the forty on the station's employ force, to prepare the product.

261. What is the largest amount bequeathed in reduction of the National Debt of this country?

Two hundred thousand pounds was obtained in 1885 by the bequest of the residue of the estate of Mr. John Ashton, of Newton Bank, near Hyde, Chester. Since the year 1810, when Mr. Burgis, of Isleworth, set the example, no less than £1,020,455 10s. 1d. of the National Debt has been wiped out by the generosity of patriotic donors and testators. In 1886, Mr. O'Reilly Drase bequeathed £40,000 to the Chancellor of the Exchequer, to be applied towards extinguishing the National Debt. From the estate of Miss Helen Blake, in 1876, the Crown received £140,000 and a large amount of real estate. Mr. George Perton, who died at Cheltenham in 1881, by his death profited the Crown £200,000; the estate of Mr. Joseph Bud yielded £100,000 in 1886; and the Heathcote case in 1887 brought in £200,000, representing the amount of the estate of Mr. William Heathcote. A Parliamentary return, styled "Crown's Nominee Account," is annually presented to Parliament, giving the windfalls for the Exchequer. The amount received during the year 1892, in respect of estates, was £62,000 7s. 4d.

262. What are the beneficial results of fogs on health?

A fog has a beneficial effect in partially purifying the atmosphere. This is borne out by the fact that when a fog subsides the deposit contains the carbon, sulphur organic bases, and other injurious and irritating particles which formerly existed in a state of suspension in the atmosphere. The 'Lancet' says: "Just as water is freed from objectionable suspended matter by the addition of an impalpable powder, or a mixture which gives rise to a fine precipitate, so probably is the air deprived of suspended impurities by the subsidence of the moisture particles in which the impurities become entangled. It is a matter of common observation that the air is remarkably clear after the subsidence of fog or mist."

263. What is the easiest method of testing diamonds?

There are several ready tests for diamonds. That which is generally adopted by jewellers has for its foundation the well-known fact that the diamond is harder than any other substance, and can consequently not be scratched or marked by anything but another diamond. The second test is that it becomes positively electric by friction, but is not electrified by

heat, and this serves to distinguish it from the topaz and many other stones. Another method of determining whether a diamond is genuine or not is to pierce a hole in a card with a needle, and then look at the hole through the stone. If false you will see two holes, but if genuine only a single hole will appear. You may also make the test in another very simple way. Put your finger behind the stone and look at it through the diamond as through a magnifying glass. If the stone is genuine you will be unable to distinguish the grain of the skin, but with a false stone this will be plainly visible. Besides, looking through a real diamond the setting is never visible, whereas it is with a false stone.

264. When was the first postal order issued in this country?

On the 1st day of January, 1881, when there were orders of ten different amounts issued, namely, 1s., 1s. 6d., 2s 6d., 5s., 7s. 6d., 10s., 12s. 6d., 15s., 17s. 6d., and £1. The orders for 12s. 6d. and 17s. 6d. were subsequently withdrawn, and orders for additional sums of smaller amounts issued in their place for 2s., 3s., 3s. 6d., 4s., 4s. 6d., and 10s. 6d. The orders rapidly gained in public favour, increasing from 4,462,920 in 1881–82, to 52,659,545 in 1891–92. The figures for each year's issue since 1881 (omitting shillings) are as follows:—

Quarter ending 31st March,	No.	£.
1881	646,989	292,150
1881-82	4,462,920	2,006,917
1882-83	7,980,328	3,451,284
1883-84	12,286,556	5,028,663
1884-85	18,831,164	7,885,347
1885-86	25,790,316	10,788,946
1886-87	31,608,711	12,958,939
1887-88	36,386,147	14,696,369
1888-89	40,282,321	16,112,079
1889-90	44,712,548	17,737,802
1890-91	48,841,765	19,178,367
1891-92	52,659,545	20,563,750

265. How many silent communities are there in the world?

One of the largest of these is the monastic order of La Trappe, a branch of the Cistercians. It possesses monasteries in many parts of Europe—one composed of German brethren being in Turkey. Although the Trappists may be classed as one of the silent communities, yet the common belief that Trappists never speak is altogether erroneous. They do speak at stated times and under certain conditions, and they make use besides of most expressive signs, each of which is sym-

bolical. Eleven hours of their day are devoted to prayer and masses; the remaining hours to hard labour—performed in strict silence. The White and Silent Nuns, known as the Bernardines—a religious sisterhood at Bayonne, founded by L'Abbé Cestac—voluntarily resign the privilege of speech. Except when they join in a chant or murmur their prayers they never open their lips to speak, and through the long year they hold no converse with human beings. Of these nuns there are over 150 houses scattered about France—at Bayonne, Bordeaux, La Rochelle, Toulouse, Montpelier, Limoges, Arras, Cambrai, and other places. The monks at La Grande Chartreuse form another silent community, for their silence is only broken once a week, when the daily routine is interrupted by a long walk, which the fathers take together. In January, 1892, the Queen Regent of Spain, with her son, the boy King, visited the celebrated Carthusian Monastery of Miraflores, about two miles from Burgos. Leo XIII. granted permission to one of the monks to speak to the Royal visitors during four hours only. Thus the Regent and her son heard the voice of a Carthusian monk, ninety years of age, who had spoken never a word in nearly half a century! The following may be mentioned as the principal communities of the silent order: Bellefontaine, France; Charnwood Forest, England: Montagnto, near Florence, Italy; Freiburg, Switzerland; Gethsemane; and Kentucky, in the United States.

266. What is the highest price ever paid for a set of false teeth?

One hundred pounds is the highest price paid for a set of artificial teeth. Fifty pounds is frequently given; and sums ranging from fifteen to twenty-five pounds are sometimes charged by first-class dentists for complete sets of false teeth. The most popular sets are supplied for a guinea. Diamonds have been set in artificial teeth, and should such a practice become fashionable, it would probably increase the price per set some ten or twenty fold. Artificial teeth have been used as a means of smuggling diamonds into the United States, thirteen teeth of one lady smuggler having a diamond hidden in a cavity in the tooth. These, when so used as diamond holders, must have been the most valuable sets of false teeth in the world.

267. Where in this country is land most valuable?

In the City of London. More than £30 10s. an inch, or a thousand guineas per yard, was paid for every piece of the land between King William Statue and Trinity Square, E.C.

The ground around Lombard Street is estimated to be worth not less than £2,000,000 an acre. £1,250,000 was asked from the South-Eastern Railway Company for a small piece of ground in Bermondsey. This piece of land was 16ft. in depth, and contained an area of 4,134 superficial feet; so that the price asked was at the rate of £13,000,000 an acre. The railway company, however, refused to purchase. Land in Pall Mall, London, has been sold at the rate of £500,000 an acre. In Cannon Street, London, in 1880, 600 square feet of land was sold for building sites for £4,500, which amounts to £7 10s. a square foot, or £330,000 an acre; and the same year, in Gracechurch Street, building sites were sold at £18 18s. a square foot, or £820,000 an acre. In 1886 these prices were far exceeded, when 1,285 square feet of land was sold for £37,000, which is £28 16s. a square foot, or £1,260,000 an acre. In Liverpool the rental of the Corporation land in 1672 was £13, whilst in 1892 this same land was valued at £12,500,000. In Glasgow plots of land have been sold for £76 15s. and £54 per square yard. In the City of Chicago a plot of land was purchased for £120, and after being held for twenty years sold for £8,000, whilst the same land is now valued at £3,600,000

268. How many regiments in the British Army publish newspapers?

Ten. The Inniskilling Fusiliers (old 27th) publish a newspaper monthly, entitled the 'Sprig of Shillelagh.' That of the Buffs is called 'The Dragon,' which mythological beast constitutes the regimental crest; the Northumberland Fusiliers (5th), 'St. George's Gazette'; and the 1st York and Lancaster (65th), 'The Tiger and Rose.' Each battalion of the East Lancashire Regiment (30th and 59th) has a paper, the title of the former being 'XXX,' and the latter 'The Five and Nine Lillywhites' Gazette' (a sobriquet long ago conferred on the corps by reason of the colour of its facings). The 2nd Battalion West Kent (97th) publishes a paper, entitled 'The Queen's Own Gazette'; the 2nd Duke of Edinburgh's Wiltshire Regiment (99th), 'The Nines'; the 2nd Suffolk (12th), 'The 2nd Suffolk Gazette'; and the 2nd Munster Fusiliers (104th), formerly an East India Company's regiment, 'The Bengal Tiger.' Besides, the Army Service Corps possesses a journal, which circulates throughout that branch generally. As a rule the regimental schoolmaster is intrusted with the position of editor—and contributions are sent in by all ranks, from the commanding officer to the junior drum boy. Their contents are varied and interesting, giving a complete record of the life of the regiment from week to week.

269. Which novel, published during the past seven years, has had the largest circulation?

An Australian and an English novel seem to compete very closely for the largest circulation within the last seven years. There is "The Mystery of a Hansom Cab," by Mr. Fergus W. Hume, first published in Australia, where 25,000 copies were sold within three months. When published in London, in 1887, its sale was such as it is said has never been surpassed. The publishers' books showed that within five months after publication, on December 3rd of that year, no fewer than 372,000 copies were sold. "Robert Elsmere," by Mrs. Humphry Ward, has had an immense sale. In five months it passed, in the three-volume form, through seven editions; and through thirteen editions in the year of its publication, 1888. By 1891 over 60,000 copies of the one-volume edition had been sold in this country, and about 500,000 in the United States of America; the sale in this latter case consisted largely of pirated editions. It has also been translated into German, Dutch, and Danish. The "Silence of Dean Maitland" ran through ten editions in the first year of its existence.

270. Can water be boiled in a sheet of writing-paper?

This can be done in the following manner: Take a sheet of ordinary foolscap writing-paper and fold it up, just as you would do to make a paper boat. Take care that the ends are folded over two or three times, so as better to hold the water. Fill the boat with cold water and hold it over the flame of a gas jet. Instead of setting the paper on fire in an instant, as one might naturally suppose, the gas will begin to boil the water, which, in the course of a few minutes, will be seen bubbling in the paper boat. After the boiling water is poured out, the portion of the paper that has been in the gas will be found to be smoked black, but this can be rubbed off, leaving the paper as sound as it was before. Besides being a matter of convenience in case of emergency, this simple experiment can be employed for amusement purposes.

271. Have frozen flowers ever been imported into this country?

At an exhibition at the Aquarium, in September, 1892, by the National Chrysanthemum Society, a number of frozen chrysanthemum blooms, from Wellington, New Zealand, were on view, and attracted a great deal of attention. The flowers were frozen as long ago as the previous April, and had been about two months in this country since the termination of their long voyage, having been brought over in the refrigerating

chamber of one of the large steamers employed for the transhipment of frozen meat. On the cylinders in which the blooms were packed being slightly thawed, the cylindrical blocks of ice were released, and in each a flower in a perfect state of preservation was seen to be embedded. The blooms, eight in number, comprised six varieties, mostly incurved Japanese. First-class certificates were awarded to two of the varieties, commending the others with one exception, in which the bloom was considered to be rather small. The silver-gilt flora medal of the society was also awarded to Mr. John Earland, of Wellington, New Zealand, for this unique exhibit. In December, 1842, Dr. John Taylor, of Backhouse, Ayrshire, kept a passion flower and a sea anemone for a considerable time in the middle of summer by inserting their stems into glass tubes, the water in which was artificially frozen.

272. How many kinds of avalanches are there ?

Avalanches have been divided into four classes : (1) Powdery avalanches, in which the snow and ice break up into powder, forming a kind of silver cloud, sparkling like quicksilver, and making a noise like distant thunder. This kind is more dangerous by reason of the commotion produced in the air than by its weight or power to overwhelm. (2) Creeping avalanches. The mass of snow being disengaged moves down a more gentle slope, as on an inclined plane, and so is sluggish in its course. (3) Glacier avalanche, consisting of a large mass of ice detached from the glacier above, which descends to the valley. This is the least dangerous kind, and is more common in summer. (4) The avalanche proper, which is the most dangerous of all, and consists of vast accumulations of snow set free from above, which increase in force as they descend, overthrowing houses, tearing up trees, burying villages, and swallowing up forests, cattle, and human beings. Avalanches are sometimes of immense size ; two which fell in the Alpine districts of Italy, in 1885, contained 45,000 and 250,000 tons of snow respectively.

273. What distance has a signal by flash been transmitted ?

One hundred and twenty-five miles. A message was in May, 1890, flashed by Lieutenant Wittenmeyer by heliograph from Mount Reno, near Fort McDowell, Arizona, to Mount Graham, near Fort Grant, where it was received by Captain Murray, the distance being 125 miles. Captain Murray by turning his instrument flashed the message to Fort Huachuaca, a further distance of ninety miles ; so that 215 miles were

covered with a single intervening station. A narrow beam of the powerful search-light on Mount Washington, shot upward at an angle of forty-five degrees, was visible overhead at Portland, eighty-five miles away. The light, which is of 100,000 candle-power, produces a sufficient illumination at a distance of twenty miles from the summit of the mountain to render ordinary print legible. At the late Electrical Exhibition at Frankfort, a 6ft. search-light of 20,000 candle-power could be plainly seen at Bingen, forty-five miles away; whilst at the late Royal Naval Exhibition Lieutenant Wells sent up a beam by means of the electric light to the height of about two miles, and this was found to be visible at least thirteen miles, whilst the illumination in the sky was seen at Frant, near Tunbridge Wells, a distance of thirty-three miles. The horizontal beam of the Eddystone Lighthouse, of nominally 500,000 candle-power, can be seen only seventeen and a half miles, and then only on a clear dark night, whereas the Naval Exhibition search-light of 6,500 candles was visible nearly twice the distance.

274. What is the earliest record of shorthand practised in this country?

Character writing was the name given to shorthand in this country when it was first introduced, and the earliest record of its practice was by Dr. Timothy Bright, who combined, as was not unusual at that time, the medical with the clerical profession. He found it of great service to him in both capacities, and in 1587 he published his work on shorthand intituled: "Characterie: An Arte of Short, Swifte, and Secrete Writing." Another treatise was published by Peter Bales, some years later, in 1600. Since then there have been at least 307 separate English systems issued, and several of these have had a very extensive publicity and popularity. English was not the only language of Great Britain, and there were four Welsh systems of shorthand. France was the second country to welcome shorthand, and at least 145 systems have been published by French stenographic authors. In the various countries of the world 883 systems have been printed, while it is estimated that no fewer than 1,000 authors have invented or adapted systems of stenography, each one of which has several features peculiarly its own.

275. In what part of the world are there soda lakes?

Amongst the varied curiosities of the State of Wyoming are its wonderful soda lakes. There are two of them, each covering about seventy-five acres, and separated from each other by a

ridge eighty rods in width. In the hot summer weather evaporation causes a thick crust of crystallized soda to form on the surface of these lakes. Sometimes this accumulates to a thickness of three or four feet, and can be taken out like so much ice. On exposure to the air the soda slacks and turns white. Another, Lake Mono, exists in Nevada. It is so full of soda, borax, and other minerals in solution, that soiled linen is made quite clean in half a minute by simply rinsing it in the lake. The water lathers naturally when agitated, and during a high wind a wall of suds three or four feet high is seen on the shore where the waves beat. In the neighbourhood of Rawlings, on the line of the Pacific Union Railway, a lake of soda was discovered a few years ago. It is several miles in circumference, and can supply 65,000 tons of soda per annum.

276. Are there any wooden railways, and where?

There are several wooden railways in Canada and the United States. One of them in the Province of Quebec is thirty miles in length. The rails are of maple, 4in. by 7in., and trains are run over them with remarkable smoothness at the rate of twenty-five miles an hour. This road is used for the transportation of timber, and the rolling stock consists of one engine and thirty-five cars. Another wooden track railway, fifteen and a half miles in length, has been constructed in South Carolina, at a cost of 1,500 dollars a mile. Some years ago a locomotive on sled runners was constructed in Glasgow, and sent to Russia, where it was employed between St. Petersburg and Cronstadt in drawing passengers and goods over the ice. The two driving wheels in the rear were studded with sharp spikes. The front part of the engine rested on a sledge, which was swivelled and turned to the right or left by wheels working in connection with an endless screw and segment rack. The locomotive is said to have run eighty-one miles an hour over the ice. A rough-and-ready kind of railroad is in use at Cumberland County, Nova Scotia, for the purpose of carrying timber from the woods to the river. The rails are made of spruce poles joined end to end, and spiked down to sleepers of the same material, and the rolling stock consists of an eight-horse-power engine and a couple of light cars. The tires of all the wheels have a flange on both sides, and are wide enough to accommodate themselves to the varying thicknesses of the wooden rails, which vary from six to four inches in diameter. The little engine is placed between the two cars, so that shunting and alteration of position are obviated. This railway is probably the cheapest ever constructed.

277. How many reformatory ships are there in Great Britain?

According to the annual returns for 1891 there are three reformatory ships in Great Britain, namely, the *Cornwall*, stationed at Purfleet, in Essex, certified for 250 boys; the *Akbar*, for 200 boys, stationed at Rockferry, Liverpool; and the *Clarence*, for 300 boys (Roman Catholic), stationed at New Ferry, Birkenhead. There are ten industrial school ships in Great Britain—five in England, two in Wales, two in Scotland, and one in Ireland. Two of such reformatory ships have tenders, also licensed. Their names and stations are as follow:—

Ship.	Station.	No. of Boys.
Shaftesbury	Grays, Thames	500
Formidable	Portishead	350
	Polly, tender to *Formidable*.	
Southampton	Hull	250
Mount Edgecumbe	Saltash, Tamar	250
Wellesley	North Shields, Tyne	300
Clio	Garth Ferry, Menai Straits	250
Empress	Helensburgh, Dumbarton	100
Mars	Dundee	400
	Lightning, tender to *Mars*.	
Havannah	Cardiff	90
Grampian	Belfast	250

278. In what way can the flame of a candle be extinguished without blowing it out or covering it with an extinguisher?

By conducting the heat of the flame away with great rapidity the flame of a candle can be extinguished without blowing or excluding the air from it. This can be accomplished in a very simple manner. Copper wire is a very rapid conductor of heat, and if a piece of thick copper wire be fixed in a piece of wood, the other end of the wire being in the shape of a coil or spiral, and such coil be held round the flame of the candle, the flame will be quickly extinguished. The copper, by its great conductivity, cools the flame so rapidly that its temperature falls below the point of ignition, and it goes out.

279. Which country produces the greatest amount of gold?

The United States, which in 1891 produced 1,604,840oz., valued at £6,880,000; the world's production for that year being 6,033,000oz. The two countries coming next in order in point of largeness of gold production are Australasia, with a production of 1,469,200oz., valued at £5,080,000, and Russia, with 1,019,000oz., valued at £4,680,000. In the returns of the

world's gold production, the several Australian colonies are given as one country. The production of the Transvaal gold-fields, in South Africa, has been increasing in the past few years by leaps and bounds. In 1887 the production was only 34,897oz., while in 1891 it had reached 836,250oz. In 1888 the Transvaal only produced 4½ per cent. of the world's yield, but in 1891 the proportion had risen to 8 per cent. It has been computed that the world's gold is increased to the extent of £500,000 every week, and that the total output amounts to twenty-six and a half millions per year. The largest gold mines in the world are at Lead City, near Beadwood, Lawrence County, U.S.A. It was there the largest gold nugget on record was found—weight 5,000oz., and valued at £18,000. The richest gold mine is the "Gold Hill Bonanza," Nevada. It is so extensive that it has to be divided into twenty-eight separate branches for working purposes.

280. How many naval courts-martial are held annually?

There were 115 naval courts-martial in the year 1891, the number of men tried thereat being 121. The number of men punished was 118: 46 by imprisonment and dismissal; 62 by imprisonment with hard labour; 3 by dismissal; 1 by confinement in cells; 3 by disrating; and 3 by severe reprimands. The number of courts-martial and men punished have considerably decreased since 1881. The following figures show the number of men tried by naval courts-martial for all offences for the years 1881 to 1891 inclusive :—

Year	Number	Year	Number
1881	266	1886	169
1882	232	1887	149
1883	212	1888	143
1884	206	1889	163
1885	159	1890	131
1891	121		

In 1891 there were 221 courts-martial on men in the Royal Marines.

281. What is the longest period over which a bankruptcy has extended in recent years?

Thirty-nine years. The bankruptcy of Strahan, Paul, and Co., the well-known bankers in the Strand, commenced in 1855, the firm closing their doors on the 11th of June in that year, and as the bankruptcy is still open, it may reach—if it does not pass—its fortieth year as an outstanding case under the Bankruptcy Acts. In 1892 a sum of £3,000 became available for division among Strahan's creditors, and at a

meeting in connection with the proposed division, not a single creditor attended. The members of the firm, being prosecuted, were convicted and sentenced to fourteen years' transportation. The Royal British Bank of Glasgow failed on the 3rd of September, 1856; dividends have been paid to the extent of fifteen shillings in the pound, and some assets still remain to be realized. Its affairs therefore are still unsettled, and remain in the Bankruptcy Court.

282. Where is the most ancient doll in existence?

Dolls have recently been discovered in Egyptian tombs, which are supposed to have been placed there before the time of Moses (B.C. 1600). The oldest British doll in existence is at present in an old Quaker house in Maryland, U.S. After William Penn returned to England with his family, his little daughter, more than two centuries ago, sent this doll to a playmate in Philadelphia, and it remained with the descendants of the first recipient and her descendants until about sixty years ago, when it was given to a family in Maryland, and passed from them soon after into the hands of its present possessors. The doll is of wood, in one piece. Not long since a doll 106 years old was shown in an exhibition at Paignton, and a Mr. Harding, of Windsor, has one in his possession over 200 years old, made of wood, and as large as a one-year-old baby.

283. Is any member of our Royal Family tattooed?

The late Duke of Clarence (Prince Albert Victor) and the present Duke of York (Prince George of Wales) were tattooed in Japan. They thus described the process in "The Cruise of H.M.S. *Bacchante*," under date of October 28th, 1881: "Back to breakfast at 9.30, and then the tattooer finished our arms. He does a large dragon in blue and red, writhing all down the arm, in about three hours. He first sketches the outside on the skin in Indian ink and water, and then pricks in the colours required, blue or red, with little instruments that look like camel-hair brushes, only instead of hair they consist of so many very minute needles. One man mixes the colours, and the other tattoos, holding the instrument in the right hand and grasping your arm with the left, while he tightens the surface of the skin on which the drawing is to be made between his thumb and forefinger. The man who did most of our party was beautifully tattooed over the whole of his body, and the effect of these Japanese drawings in various colours and curves on his glistening skin was like so much embroidered silk." The Duke of Edinburgh is tattooed with fanciful designs on his limbs, which were also

done by some of the skilful Japanese needle artists. Several members of the aristocracy have had their coats-of-arms tattooed on their breasts.

284. Who is the tallest British peer?

The tallest British peer is Baron Knightley, who was created in November, 1891. Before his creation he was known as Sir Rainald Knightley. He is nearly 6ft. 6in., and when in the House of Commons he closely followed Colonel Malcolm, who was the tallest member of the last Parliament. Up to the end of November, 1891, the tallest member of the British peerage was Henry Francis Seymour Moore, the third Marquis of Drogheda, who was 6ft. 5in. in height. He sat in the House of Lords as Baron Moore. The Duke of Devonshire (better known as the Marquis of Hartington) is probably the most distinguished of tall peers in the House of Lords. The eldest son of the Duke of Rutland (the Marquis of Granby), should he survive his father, who was born in 1818, will make a notable addition to the tall peerage when he takes his seat.

285. Do children playing on a hill cause it to vibrate?

Yes; such is a fact. It has been found that the playing of the children on the slopes of Flamsteed Hill, on which the Royal Observatory of Greenwich stands, sets the hill into vibration to such an extent as to interrupt observations which depend upon the motionlessness of a tray of mercury. Hundreds of children are accustomed in the evening to romp upon the hill outside the Observatory walls. Joining hands, they run headlong down the slope, and tumble in a heap at its foot. The result is that the solid hill is thrown into such a state of tremor that the vibrations continue to be felt at the Observatory until long past midnight, and for many hours after the tired children have gone to sleep.

286. Has the thickness of a soap bubble ever been measured?

Scientific experts have succeeded in measuring the thickness of the envelope of soapy water inclosing the air of the bubble, when it has become so thin as to produce rainbow tints. At the appearance of the shade of violet it was one-fourth the thickness of the length of an ordinary violet wave of light—1-60,000th of an inch—thus making the thickness of the bubble at that point 1-240,000 of an inch. As the bubble continues to expand, a black patch is formed adjacent to the pipe from which the bubble is being blown, and the thickness of the bubble at such patch is only one-fortieth of the thickness

of the violet section. Sir Isaac Newton was the first who succeeded in measuring the thickness of the film of the soap bubble by the colour. The colours of the bubble change as its thicknesses vary by evaporation. Professor Boys can blow one soap bubble inside another, and make the inner one lift the outer one without breaking either. He can make a soap bubble roll down a spiral staircase covered with soap film, and leap from step to step, as if it were made of ivory instead of water.

287. How often does the time-ball at Greenwich fail to act?

About four times in the course of a year, on the average. On October 14th and December 10th and 13th, 1891, the Greenwich time-ball was not raised, on account of the violence of the wind; and on the 1st of April, 1892, the springs of the mean solar clock failed to act, so that the ball did not drop, nor was any signal transmitted to the General Post Office. On October 19th, through sudden failure in the electric train of the mean solar clock, the signal at thirteen hours was eight seconds late. On November 22nd (Sunday), the Greenwich signal did not reach the General Post Office through failure in the connections outside the Observatory. In 1890 the time-ball dropped accurately on 363 days, while in 1889, on two days the ball did not fall and on three days it fell incorrectly.

288. Where was gas first used for illuminating purposes?

The first use of coal-gas for illuminating purposes in this country was at Culross, where it was manufactured by accident. Lord Dundonald, of Culross Abbey, had patented a process for making coal tar, and in this operation the incondensable part of the products was allowed to escape into the air by openings in the brickwork. To these openings the workmen were in the habit of attaching iron pipes, and lighting the gas which escaped at the other end, thus getting light during darkness. Lord Dundonald also collected the gas in a vessel constructed for the purpose, and, carrying it to the Abbey, lighted the hall when entertaining company. The first idea of manufacturing gas for lighting purposes is credited to Mr. W. Murdoch, a native of Ayrshire, in Scotland. In 1792 he lighted his own house and office at Redruth, Cornwall, with gas, and also adapted it to the lighting of a small steam-carriage which he used in going to and from the various mines of which he was manager, and when he returned to Scotland in 1797, he lighted his premises at Old Cummock, in Ayrshire, with gas. In 1798 the Soho Foundry of Boulton

and Watts, near Birmingham, was lighted with gas by Murdoch, then acting as engineer for that firm. The first employment of gas in Paris occurred in 1802. In 1803 the new light was adopted by Mr. Winsor in the Lyceum Theatre, and in 1804 Mr. Murdoch erected gas-works on a grand scale at Messrs. Phillips and Lee's cotton mill, Manchester. Gas was used to light Westminster Bridge on the 31st December 1813. In 1816 its use became general throughout London.

289. What animal can leap the greatest distance?

The galago, or flying lemur. This singular animal is a native of the Indian Archipelago. It is from 2ft. to 3ft. in length, and is furnished with a sort of membrane on each side of its body connecting its limbs with each other; this is extended and acts as a parachute while taking its long leaps, which measure about 300ft. in an inclined plane. The kangaroo can leap with ease a distance of between 60ft. and 70ft., and can spring clean over a horse and take fences from 12ft. to 14ft. in height. The animals that can leap the greatest distance in proportion to their size are the flea and the grasshopper, the former being able to leap over an obstacle 500 times its own height, while the grasshopper can leap for a distance measuring 200 times its own length. The springbok will clear from 30ft. to 40ft. at a single bound. The flying squirrel, in leaping from tree to tree, often clears 50ft. in a leap. This animal also has a broad fold of skin or membrane connecting its fore and hind legs. A steeplechase horse, called The Chandler, is reported to have covered 39ft. in a single leap at Warwick some years ago. Some species of antelopes can make a leap 36ft. in length and 10ft. in height. A lion and a tiger each clear from 18ft. to over 20ft. at a bound while springing on their prey. A salmon often leaps 15ft. out of the water in ascending the falls of rivers.

290. Where is the strongest magnet in the world?

At the Stevens Institute of Technology in New York, is a magnet weighing 1,600lb., with a lifting capacity of from thirty to fifty tons, or from forty to seventy times its own weight. Smaller magnets appear to be considerably stronger than the larger ones in proportion to their size, as a very small magnet, now in the Physical Collection of the Edinburgh Museum, weighing only three and a half grains, has a carrying power of 1,560 grains, or more than 445 times its own weight. One of the largest and strongest magnets in the world is that at Willett's Point, New York. It came to be made by accident. Major King

happened to see two large 15in. Dahlgren guns lying unused side by side on the dock, and immediately conceived the idea that a magnet of enormous power could be constructed by means of these cannon, with a submarine cable wound round them. The magnet, which stands about 10ft. from the ground, is 18ft. long, and has eight miles of cable wound about the upper part of the guns. It takes a force of 25,000lb. to pull off the armature. A seemingly impossible experiment was performed with some 15in. solid cannon balls, the magnet holding several of them suspended in the air, one under the other. The sledge-hammer, wielded in a direction opposite to the magnet, feels as though one were trying to hit a blow with a long feather in a gale of wind.

291. Why does a person unable to write use "X" to denote his signature?

Signing with the cross was first practised by Christians to distinguish themselves from the Pagans. In ancient times kings and nobles used the sign of the cross, whether they could write or not, as a symbol that the person making it pledged himself, by his Christian faith, to the truth of the matter to which he affixed it.

292. Where did the first sale by auction take place in this country?

At Oxford, on February 28th, 1686, for the disposal of books. It, however, appears that two others had taken place on previous occasions, the dates of which are not recorded, but simply referred to on the title-page of the catalogue of 1686. The next oldest was also one of books, when the library of John Lloyd, Bishop of St. David's, was sold at Tom's Coffee House, London, in 1699, the auctioneer being John Bullard. The first general public auction of goods took place in London in 1700, when surplus goods, the property of Elisha Yale, Governor of Fort St. George, Madras, for which he could not find accommodation, were sold to the highest bidders. Up to 1799 all auctions in this country were held by candle-light. The forms of auctions vary in different countries. In Japan there are no public bids. Each makes his offer by placing a paper slip containing the amount he is willing to give in a vase. When all have been inserted, the auctioneer extracts them, the person with highest amount becoming the purchaser. In England and America the seller bears the expense of the sale. In France and Italy the purchaser bears the cost, 5 per cent. being added to his purchase. In Holland the purchaser pays 10 per cent. additional. In Arabia bidding at auctions is conducted by touch.

293. Where is the coldest town in the world?

In Werchojansk, Siberia. This town, which lies in the valley of Jana, about 9ft. above the level of the river, in latitude 67° 34′ N., longitude 133° 51′ E., and at a height of about 350ft. above the sea, has the greatest winter cold that is known to exist upon the globe. Monthly means of 58° F. occur even in December—a mean temperature which has been observed nowhere else in the Polar regions; and minima of 76° are usual for the three winter months (December–February). In the year 1866, March also had a minimum of 77°, and during that year December and January never had a minimum above 76°, while in January, 1885, the temperature of 89° was recorded. These extreme readings are hardly credible, yet the thermometers have been verified at the St. Petersburg Observatory. To add to the misery of the inhabitants, at some seasons the houses are inundated by the overflow of the river. The yearly range of cloud is characteristic of the climate; in the winter season the mean only amounts to about three-tenths in each month.

294. What is the longest balloon voyage on record?

A little over 1,200 miles. In 1883 three travellers ascended in a balloon in France with the object of crossing the Mediterranean to Algeria. The wind, however, was in a direction unfavourable to their proposed journey, and they were carried towards Corsica. Near this island the balloon descended to the water, and for a time they were in great danger of losing their lives. They succeeded, by throwing out the whole of their apparatus, in lightening the balloon to such an extent that it again ascended to a height of many thousands of feet, and they were carried into Italy, where they safely descended at a little village near Brescia. Charles Green, accompanied by two friends, ascended from London in a balloon on the 7th of November, 1836, crossed the Channel between Dover and Calais, and passing over France and Belgium, found themselves the next morning over the Rhine, and then descended at Wiborg Both these trips covered about 1,200 miles. Another balloon voyage of nearly the same length was accomplished by two Americans, in 1859. They attempted to travel from St. Louis to New York, but after passing Lake Erie, and encountering adverse winds, were obliged to descend.

295. Does electric light cause deafness?

A curious phenomenon was related by M. d'Arsonval before the French Academy of Medicine. After gazing for a few seconds on an arc light of intense brilliancy, he

suddenly became deaf, and remained so for nearly an hour and a half. Surprised and somewhat alarmed in the first instance, but reassured by the disappearance of the symptoms, he repeated the experiment with the same result. When only one eye was exposed to the light no very marked effect was produced. Workers in a strong electric light are subject to a stroke much in the same way as workers under a hot sun receive a sunstroke. The effects of the electric stroke, however, are not so serious as the sunstroke. A person may be standing twelve or thirteen yards away from the electric arc light—at which distance the thermometer will not be raised in the slightest degree—when he suddenly feels a smarting sensation on his neck, face, and forehead, his skin becomes bronzed and red, and his eyes are intensely painful with the feeling that innumerable atoms of dust are under the lids, and tears will flow uncontrollably for a considerable time. On first encountering daylight the person struck is quite sightless, and for some time afterwards everything appears quite yellow. The workers in electric light protect their eyes by dark glasses. Deafness is frequently caused by the constant use of the telephone. The complaint known as tinnitus is due to aural overpressure, caused by the condition of almost constant strain of the auditory apparatus, in which persons constantly using the telephone have to spend a considerable portion of each working day.

296. How many members of the Ministry receive salaries of odd or fractional amounts?

Seventeen; their offices and salaries being as follows:—

Office	Salary
Chief Secretary for Ireland	£4,425
Lord Advocate	3,238
Solicitor-General for Scotland	955
Vice-Chamberlain	924
Treasurer of the Household	904
Comptroller of the Household	904
Ten Lords-in-Waiting, each	702
Parliamentary Groom-in-Waiting	334

The Attorney-General and Solicitor-General each receive large amounts in fees in addition to their salaries. A return made of such fees in 1886-87 showed that the Attorney-General received £7,000 salary and £5,109 fees, or, in all, £12,109; while the Solicitor-General in the same year received £6,000 salary and £2,553 fees, or, in all, £8,553. Both these law officers of the Crown have, in addition, the right to increase their income by private practice. It is understood that the present holders have agreed to some curtailment of such right while they continue to hold office.

297. Which European country has no National Anthem?

Italy has no National Anthem, for neither the "Garibaldi Hymn" nor the "Royal March" can justly lay claim to this title. Germany does not possess a national song in the true sense of the word. Kovener's "Sword Song" is famous because of the romantic circumstances under which it was composed; while the "Wacht am Rhein" owes its popularity to its applicability during the Franco-German War. Some, however, consider "Heil dir im Siegerkranz," which is none other than the air "God Save the Queen," as the National Anthem of the Fatherland. Spain is not more fortunate than Italy or Germany. She has many party songs, but none of them can be said to breathe a purely national feeling.

298. What is the average age of British Army horses?

The average age of horses of the British Army is $5\frac{2}{12}$ years for the cavalry, $5\frac{7}{12}$ for the horse artillery, $6\frac{4}{12}$ for the field artillery, and $7\frac{3}{12}$ for the draught horses of the Army Service and other staff corps. Including India, some 25,518 horses and mules have to be maintained on a peace footing. In case of war one-half more would be required. The number required to replace annual wear and tear, by accident, death, and casting, is about 1,600, sometimes more, according to circumstances. The cost of military horses ranges from £28 to £35, but they are becoming very scarce, owing to Germany, France, and Russia purchasing the best. The cost of feeding these 25,000 animals is about £25 each per year, or a total of £637,500.

299. What is the capacity of the House of Commons' wine cellar?

The wine cellar of the House of Commons is capable of holding some £30,000 to £40,000 worth of wine. It is over 200ft. long, with innumerable small cellars branching from the main avenue. In this storehouse there is seldom less than £3,000 worth of wine. The various brands are selected in a curious way. Two or three well-known merchants send in samples of the wines they can supply. A napkin is fastened round each bottle and a number given to it. The judges then meet together, each having by his side a sheet of paper. As the wine is handed round the judges record their impression of it, and the brand that is most generally liked secures for the owner a lucrative order. On the way to the cellar is the cigar-room, a little compartment containing £1,000 worth of the best weeds. In a Parliamentary Session of average

length 7,800 luncheons and 10,650 dinners are served to members, and 1,120 luncheons and 1,190 dinners in the strangers' room.

300. What number of patients resort to retreats for inebriates?

There were 115 in 1891, and 109 in 1890. The Inspector of Retreats under the Inebriates Acts, in his report for 1891, says that he had every reason to be satisfied with the general condition of all these establishments, the health of the inmates having been good, and no death having taken place. In America there were, in 1887, about fifty such institutions, with over 1,000 patients. In some States of the Union patients may be compulsorily admitted to these retreats. It is claimed in the United States that in fully 3,000 cases 35 per cent. of those who had remained at least one year had been permanently restored.

301. In what division of the United Kingdom are there most distilleries?

In Scotland, which had 128 distilleries out of a total of 167 for the United Kindom in 1891. The number at work during the years ended 30th September, 1890 and 1891, in each of the three divisions of the United Kingdom, was as follows:—

	1890.	1891.
Scotland	124	128
Ireland	29	29
England	10	10

The number of proof gallons of British spirits distilled in the years ended 31st March, 1891 and 1892, was as follows:—

	1891.	1892.
Scotland	21,101,023	20,287,115
Ireland	12,988,924	14,408,221
England	10,533,637	11,543,435
United Kingdom	44,623,584	46,238,771

302. Why does snow fall in flakes and rain in drops?

Snow falls to the earth in flakes because it is water solidified in star-like crystals, each snowflake being usually made up of several crystals, which are excessively light on account of the large quantity of air amongst the frozen particles. The snow-crystals arise from the slow passage of the water vapour of clouds, when the temperature falls below freezing-point, into the solid condition, the fairy-like transformation taking place by the molecules or smallest independent particles of the water grouping themselves with the utmost mathematical regularity around different centres. Each crystal of

snow, as of anything else, is, therefore, a more or less perfect geometrical solid. The most complete snow-crystals are formed in a calm atmosphere, where there is nothing to retard the gradual process of crystallization or molecular construction. Rain, on the other hand, being a liquid, falls in drops. Free liquid surfaces, by virtue of surface tension, tend to contract in all directions; that is, to draw themselves together into a form having the smallest possible area. In a falling rain-drop the liquid is as nearly as possible free to assume any form determined by its own molecular properties; and, in order that its exposed surface may be as small as possible, its form is spherical.

303. Which is the largest Royal Family in Europe?

That of England. Her Majesty Queen Victoria's family circle numbered in December, 1892, fifty living descendants, including sons and daughters, grandsons and grand-daughters, great-grandsons and great-grand-daughters; besides whom she has four sons-in-law, four daughters-in-law, five grandsons-in-law, and one grand-daughter-in-law. The Queen has lost one son and one daughter, five grandsons, one grand-daughter, one great-grand-son, and one son-in-law. If these were living, her family circle would number seventy-four. There are now seventeen members of the English Royal Family available as successors to the throne. The next largest European Royal Family is that of Denmark, King Christian having six children and twenty grandchildren. Edward I. was the father of eighteen children and George III. had fifteen sons and daughters. The oldest Royal Family in Europe is that of the Ducal House of Mecklenburg, which traces its descent from Genseric, who sacked Rome A.D. 455.

304. Is there any liquid absolutely tasteless?

The only liquid absolutely tasteless is distilled rain-water, which has undergone distillation immediately after it has fallen. The sense of taste is so delicate that the slightest flavour of any foreign substance can be easily detected by it, even when present in the most minute quantity. Dr. Venables, of the University of North Carolina, U.S., has made some interesting experiments on this subject. The flavoured matter used was dissolved in a solvent and diluted with water, two persons being employed to taste the dilution. The limit of taste was taken as the point of dilution at which the characteristic taste of the substance was not perceptible. In each case one cubic centimetre of solution was tasted. The results are: For sugar, 3-1,000th of a gramme barely tasted; for salt (chloride

of sodium), 1-1,000th of a gramme barely tasted; for tannin, 2-10,000th of a gramme barely tasted; for hydrochloric acid, 1-10,000th of a gramme barely tasted; for strychnine, 3-10,000,000th of a gramme barely tasted; and for saccharine, 5-1,000,000th of a gramme barely tasted. By this it may be realized how pure and tasteless distilled rain-water must be. Electric currents have no taste, but may cause one by decomposing the fluids of the mouth. The feeling of taste is more perceptible when the eyes are shut, and it is much better developed in women than in men.

305. Which is the most costly British ironclad?

The *Royal Oak*, built by Laird Brothers, of Birkenhead, with a displacement of 14,300 tons and engines of 13,000 indicated horse-power. She was floated out from her building dock in November, 1892. Her armament consists of four sixty-seven ton guns, ten 6in. quick-firing guns, eighteen smaller quick-firing guns, and seven torpedo tubes. The *Royal Oak* was one of the eight ironclads directed to be built under the Naval Defence Act of 1869; four of which have been constructed in the dockyards, and four by private contract. The respective cost of these eight vessels, as originally estimated, inclusive of machinery and armament, was as follows:—

Built by Private Contract.	Displacement. Tons.	Cost. £.
Royal Oak	14,300	952,228
Ramillies	14,300	949,525
Resolution	14,150	927,605
Revenge	14,150	927,605
Built in Dockyards.	**Displacement. Tons.**	**Cost. £.**
Royal Sovereign	14,150	940,661
Hood	14,150	937,940
Repulse	14,150	927,403
Empress of India	14,150	917,363

When commissioned, the cost of each of the above will no doubt exceed a million sterling, but their ultimate position, in respect of cost, will most probably be the same as given above. The cost of the first British ironclad was £400,000, which was about double the cost of the old three-decker line-of-battle ships.

306. In which civilized country are there no telegraph poles?

There are no telegraph poles in China. This is not due to the fact that there are no telegraph lines, nor because there is

no suitable wood or materials which may be used for poles, but the reason is purely a religious one. The Chinese worship their ancestors, and regard their last resting-places as so sacred that they deem it a sacrilege to allow even a shadow to be cast upon their graves. When the linemen of the first telegraph companies began operations they were greatly embarrassed in their work by crowds of natives who followed them about, and with the most frightful blasphemies cut down the poles as fast as they were erected. For some time it was impossible to obtain any explanation; but at last it was discovered that, in the more thickly settled districts of the Empire, graves were everywhere to be found, and scarcely a pole could be erected anywhere but that at some time of the day its shadow could be seen upon a grave. It was very evident that it was impossible to overcome this difficulty, and the Chinese Government were entirely powerless in the matter. So the solution was to bury the wires with the ancestors, and the underground system has proved perfectly efficient.

307. Which English poet occupied thirty years in writing a single poem?

This was William Langland, whose poem, "The Vision of William concerning Piers the Ploughman, together with Vita de Do-wal, Do-bet, et Do-best secundum Wit et Resoun," was the work of his life. He was engaged on it from 1362 to 1392, revising, rewriting, omitting, and adding. He produced it in three notably distinct forms, all showing with what keen and unwearied interest he watched the course of events. Milton's "Paradise Lost" was commenced between 1639 and 1642, and completed about the time of the "Great Fire of London," in September, 1666. Its author composed it in passages of from ten to twenty lines at a time, and then dictated them to an amanuensis, usually some attached friend. It was first published in 1667, by one Samuel Simmons, and a second edition appeared in 1674. For these two editions Milton received £10, and his widow £8 more. Gray's "Elegy" is said to have occupied his time for seven years.

208. Where is the best collection of mosses in this country?

The herbarium of the British Museum has acquired, by presentation from the widow, the very valuable collection, and the best in the kingdom, made by the late Mr. George Davies, of Brighton. It comprises upwards of 20,000 specimens of mosses, hepaticæ, and lichens, partly gathered by Mr. Davies in Great Britain and on the Continent, and partly

sent to him by collectors in New Zealand, Samoa, India, the West Indies, and America. There are over 400 known varieties of mosses. In this country there are 290 varieties; in Germany, 280; in Sweden, 226; and in Lapland, 160. There are in America many varieties which are represented in Britain. The United Kingdom is said to have a greater number of varieties of mosses than can be found elsewhere in Europe in the same extent of country.

309. Which is the most powerful locomotive in this country?

One named "Greater Britain," which was built at the London and North-Western Railway Works at Crewe, and made its trial trip on the 4th of November, 1891. It is built on the compound principle, and is fifteen tons heavier than an ordinary express engine. The high-pressure cylinders are 15in. diameter and the low-pressure cylinder is 30in. diameter, the stroke in each case being 24in. As far as tractive force is concerned, the engine is practically equivalent to a non-compound locomotive, having a pair of 21in. cylinders, with a 2ft. stroke, the driving wheels being 7ft. 1in. diameter. The special feature of the "Greater Britain" is the design of the boiler, which has been made with a very long barrel to allow of both driving axles being placed under it. The speed of this locomotive on its first trip was over a mile a minute. The fleetest locomotive in the world is said to be Engine No. 385 of the Central Railroad of New Jersey. The extraordinary record of a mile in 39¼secs., equal to 91·7 miles per hour, was made some time ago by this locomotive. In one journey it ran five miles in 205secs., and it has now even beaten its own record of 39¼secs. for a mile in some parts of a run recently made.

310. What place of worship is known as the "Wesleyan Cathedral"?

Wesley's Chapel, situated opposite the old Bunhill burial ground in City Road, London, of which the Rev. Allen Rees is the "Dean in Residence." It was built by Wesley some years before his death, which took place in the year 1791 at his house near the chapel. It is known generally among Wesleyans as "City Road Chapel." In 1891, the centenary of John Wesley's death, the chapel was renovated at a cost of something like £10,000. The foundation was found insecure, and was made good. The roof was raised, the building was refurnished, including a splendid new organ, the sister churches of America, Australia, and elsewhere contributing handsome marble pillars, to replace

the old wooden ones supporting the gallery. A very fine statue of Wesley, by Adams-Acton, has also been placed in front of the building overlooking City Road, and within a few yards of the house where he lived. Representative meetings were held here in the centenary year of Wesley's death, when it was decided to alter the name from "City Road Chapel" to "Wesley's Chapel," many of the speakers at these gatherings very fittingly referring to the building as the "Wesleyan Cathedral," or the "Cathedral of Methodism." In the Isle of Man, Rose Mount Wesleyan Chapel, Douglas, is known as the Wesleyan Cathedral.

311. What wild animal increases with the increase of population?

The armadillo, of South America, does so, and Mr. Hudson, in his book on the Pampas of La Plata, which he recently published, gives some very interesting particulars about this wild animal. Like the swine, it devours any kind of animal and vegetable food. It catches mice and poisonous snakes, kills them, cuts them up, and eats as much as it requires. Although often hunted for its succulent flesh, by means of trained dogs, this singular animal actually multiplies in number as the population of the district it inhabits increases. "If versatility in habits or adaptiveness can be taken as a measure of intelligence," says Mr. Hudson, "this armadillo, a survival of the past, so old on this earth as to have existed contemporaneously with the glyptodon, is the superior of the large-brained cats and canines."

312. Where is the only Gothic dome in existence?

In Ely Cathedral. This cruciform structure, 537ft. long by 179ft. across the great transepts, offers examples of all kinds of Gothic, from Early Norman to Late Perpendicular, and is a growth of more than four centuries. There is the Early English "galilee" or western porch (circa 1200); the western tower, 225ft. high, Transition Norman and Decorated (1174–1382); the south-west transept, now the baptistery; the Late Norman nave (1150–89), 208ft by 78ft., with modern painted ceiling; the great transepts (1083–1170), Norman, with Perpendicular insertions; the richly sculptured choir (1234–1533), Early English, Decorated, and Perpendicular; the Decorated north-eastern Lady Chapel (1321–49); and at the crossing the exquisite Decorated "Octagon" and lantern (1322–42), built by Alan de Walsingham on the fall of the great central tower. This, the only Gothic dome in existence, rises to a height of 170ft.

313. What important trade is supervised by a blind man?

That of shipbuilding by John B. Herreshoff, head of the celebrated Rhode Island, U.S., shipbuilding firm, whose fast yachts have made him famous on all waters. J. B. Herreshoff has been blind since he was fifteen years old, but so keen are his other senses that he carries in his mind perfect pictures of his vessels, and is thoroughly familiar with the minutest details of his trade. When a description of a piece of machinery is read to him, he can at once point out its merits and defects, and so fine is his sense of touch, that by merely running his fingers over the lines of a design he can gain as accurate an idea of it as if he saw it. He has been in business over twenty years, and, with his younger brother Nathaniel, has designed and constructed many of the swiftest torpedo boats and steam and sailing yachts now afloat. No one ignorant of his misfortune, seeing Mr. Herreshoff dictating letters, receiving reports, or strolling about his yards giving directions to his foremen, would ever suspect that he was blind. Vidal, the blind sculptor of Paris, is another wonderful instance of the marvellous power and genius frequently possessed by the blind. By slowly passing his hand over an object he notes its external proportions, and imitates them in clay in a manner which astonishes the beholder.

314. What is the longest time any European play has taken in presentation?

Nine days, which was the time taken in the representation of Mendoza's play, "Querer por Solo Querer" (To love for love's sake), written by that Spanish author in 1649. It was a Court play, in which the characters, males, giants, and all, were played by females, and those of the highest order of grandeeship. A fire broke out on one of the nights when the play was being acted, when the whole *dramatis personæ* were in danger of being burnt, no one daring, out of pure respect, to lay hands upon such "great donnas," till the young King, breaking the etiquette, bore the Queen through the flames upon his back, and the grandees following his example, the whole courtly company of players were got off in tolerable safety.

315. Which town in Scotland has the largest area?

The City and Royal Burgh of Glasgow is built on a larger area than any other town in Scotland. The census of 1891 showed Glasgow to have a population of about 565,000, but towards the end of 1891 a large number of the outlying burghs were annexed to Glasgow, adding about 150,000 to its inhabi-

tants, so that the population of the city is now over 700,000. It measures fully five miles from its east to west extremities, and about four miles from extreme north to extreme south, and covers an area of about fifteen square miles, or between 9,000 and 10,000 imperial acres. The yearly rental of Glasgow is now rather over £4,000,000, about one-half of which is for dwelling-houses, and the other half warehouses, shops, workshops, railways, canals, etc. The Clyde is the greatest shipbuilding port in the world, and produces about three times the tonnage that is turned out on the whole of the Continent.

316. Were books ever made of copper?

Books were originally metal plates and boards, or the inner bark of trees. In many cabinets may be found the discharges of soldiers, written on copper plates. Whilst an agriculturist at Benares, the sacred city of the Hindus in Northern India, was recently tilling his ground, he came upon a copper plate. A search brought to light several others. Twenty-four of the plates are about 18in. long by 12in. broad, and three 12in. by 8in. The former have huge copper seals with rings attached to the plates, while the three, which appear to constitute one book, were linked together. The plates bear inscriptions relating to dealings in land in the time of Govind Chandra Deva, Sambat 1196–1149 B.C. Hesiod's books were written on leaden tables; lead was used for writing, and rolled up like a cylinder. Montfaucon notices a very ancient book of eight leaden leaves, which, on the back, had rings fastened by a small leaden rod to keep them together. They were afterwards engraved on bronze. The laws of the Cretans were on bronze tablets; the Romans etched their public records on brass. The speech of Claudius, engraved on plates of bronze, is preserved at Lyons. Several bronze tablets have been dug up in Tuscany. Treaties between the Romans, Spartans, and the Jews were written on brass; and estates, for better security, were made over on this enduring metal.

317. Which animal can live longest without food?

Apart from toads and bats, which have been known to live inside stones for a lengthy term of years, this is undoubtedly the serpent. One of these reptiles, in the menagerie attached to the French Museum in Paris, refused all food for twenty-two months, in spite of all the efforts of its keeper. A large anaconda from South America, in the six years between 1885, when he arrived there, and 1891, had only thirty-four meals, or an average of less than six meals per annum. In 1887 he had seven, but in 1886 he only broke his fast four times. The intervals between the meals of the anaconda are

very unequal, varying from twenty-three to 204 days. The noctule (*Vespertilio, noctula*), one of the bat tribe, fasts in this country regularly for not less than seven months out of each twelve, retiring for its long winter sleep about the end of July or the beginning of August. A civet-cat can live ten days without food, an antelope twenty days, an eagle twenty-eight days, a badger thirty days, a dog thirty-five days; a horse will live twenty-five days without solid food, merely drinking water, seventeen days without either eating or drinking, and only five days when eating solid food without drinking; a crocodile will live two months without food, a scorpion three months, a bear six months, a chameleon eight months, and a viper ten months. A curious instance of an animal living without food is related by MM. Laboulbène and Mégnin. In 1865 the Shah of Persia engaged the services of a French physician, Dr. Tholoyan, who was a friend of Laboulbène, and was asked by him as to the truth of certain stories concerning the Persian argas, and to send home specimens. In June, 1877, the creatures were sent alive, but without food, packed in cotton wool in a box, and wrapped up in paper. Laboulbène sent the box to Mégnin, who mislaid it; just four years afterwards the box was found and opened. The males had died, the females had had numerous young, which had died, but the females were living, and ready to feed when they got the chance.

318. Where is the biggest earthenware jug in the world?

Within sight of the station at Atherstone, on the London and North-Western Railway, there is to be seen an enormous earthenware jug, the largest in the world. This capacious article was manufactured at the Potteries, Church Gresley, over fifty years ago. Its holding capacity when full is one hundred and fifty quarts, and it is so large that a man can sit inside it. It now rests over the front door of a china, glass, and earthenware warehouse Many curious jugs and pitchers, the property of bell-ringers, are found in several parishes. One is preserved at Hadleigh, in Suffolk, which is of brown glazed earthenware, holds sixteen quarts, and bears this inscription:—

> If you love me do not lend me,
> Euse me often, and keep me clenly;
> Fill me full, or not at all,
> If it be stroung, and not with small.

Among the antiquities discovered in the Island of Rhodes, in the Mediterranean Sea, and in Troas, the north-western corner of Asia Minor, where was situated the ancient City of Troy, have been found wine flagons, of pottery or earthenware, that are as much as 7ft. high.

319. In which town in Great Britain are savings banks most flourishing?

Glasgow; the deposits in the Glasgow Savings Bank being upwards of four and three-quarter millions sterling, or very nearly double that of any other savings bank in the kingdom. The savings banks in Great Britain having deposits in November, 1891, exceeding a million and a half were as follows:—

Towns.	Amount of Deposits. £
Glasgow	4,804,222
Liverpool	2,460,316
Manchester	2,397,508
Edinburgh	1,672,480

Lancashire stands at the head of the counties, with savings banks deposits amounting to £8,082,683 16s. 1d., Lanarkshire following with £4,852,443 6s. 2d. The deposits in England and Wales amounted to £30,483,578 3s. 9d., and in Scotland to £9,820,437 6s. 7d. The town with the smallest amount of savings banks deposits is Ware, with £581 0s. 10d.

320. Which private residence has the largest organ?

The town residence of the Duke of Sutherland, Stafford House, contains the largest and most complete organ to be found in any private residence in this or, it is believed, in any other country. This organ, by one of the best makers, was erected by the late Duke, who was a musical enthusiast, in the gallery of the grand hall at Stafford House, St. James's, London. The cost of the instrument, which is blown by a hydraulic engine, was £6,000. Mr. Holmes, of The Hall, Primrose Hill Road, Regent's Park, owned some time ago one of the largest private organs ever constructed in this country. It was built from the designs of Mr. W. T. Best by Messrs. Bryceson Brothers, commenced in 1872, and finished in 1875. It was so large that Mr. Holmes had to build a special room or hall for it. It has four keyboards, and stands 50ft. high, 30ft. wide, and 30ft. deep. The largest pipe is in metal, 38ft. high and 20in. in diameter, vibrating thirty-three times in a second. The weight of the organ is eighty-seven tons. At the opposite end of his concert-room was his echo organ, on a raised corbel, 30ft. from the floor, and at a distance of 100ft. from the keyboards. It is controlled from the fourth manual of the great organ.

321. Has silk ever been made from wood?

This has been done at St. Etienne, in France. The efforts of certain manufacturers of St. Etienne to work a process invented by Count Chardonner for the manufacture of silk

from wood pulp — by a method similar to that used in converting wood into paper — is described in a recent American Consular report. A few years ago similar attempts were made. Large works were built at Besançon, and preparations for making silk from wood were made on a somewhat extravagant scale. Some remarkable specimens of silk made by this process were shown, but at that time it was found it could not be then woven successfully in large pieces, and that it was so highly inflammable as to be a source of danger. These difficulties are said to be overcome by the company formed at St. Etienne, who offer to the trade a substitute for silk made from wood which possesses all the essential qualities of silk, and can be sold for less than half the cost of the genuine article. In tropical countries excellent silk is obtained from the prepared and finer fibres of the bamboo, whilst another form of silk is obtained from the pods of the silk cotton-tree, of which there are several varieties in existence.

322. Which is the southernmost house in Great Britain?

One situated under the shadow of the Lizard Lighthouse, and occupied by that distinguished Cornish water-colour artist, Mr. Thomas Hart. Pilgrimages are frequently made by art connoisseurs and picture fanciers to this artist's studio, which is one of the most delightfully situated in the country.

323. Which fish lives to the greatest age?

So far as recorded instances go, this distinction appears to be shared by the carp and the pike. In 1497, in a fish-pond in Swabia, a carp of prodigious size was found, which had through its gills a ring of copper with these words upon it in Latin: "I am the first fish that was ever put into this pond by the hand of Frederick II., Governor of the World, on the 5th day of October, 1230," proving that the carp must have lived at least 267 years. Gesner relates that about the same year an enormous pike was caught in a lake near Heilbronn, with a brass ring attached to it, recording that it was put into the lake in the year 1230, making its age considerably over 250 years. The ring is still preserved at Mannheim. There is a tradition of a pike, which lived within the last fifty years, in Russia, whose age dated back to the fifteenth century; also that goldfish have been in the same family at Washington over fifty years, though they are not much larger than when originally placed in the aquarium, and as lively as when young. There are fish in the Royal Aquarium at St. Petersburg that are known by records to have been in it

140 years, some of which are five times as large as when captured, while others have not grown an inch. An attaché of the Chinese Legation states that there are sacred fish kept in some of the palaces of China which are even older than any of those in Russia.

324. What depth of snow is equivalent to an inch of rain?

Newly-fallen snow having a depth of about 11¾in. is equivalent to 1in. of rain. A cubic foot of newly-fallen snow weighs 5½lb., and a cubic foot of fresh or rain water weighs 62½lb., or 1,000oz. An inch of rain means a gallon of water spread over every two square feet, or about a hundred tons to every acre. The density of snow naturally varies a good deal according to the speed with which it falls. Temperature, also, has much to do with its bulk. In cold, crisp weather, when the thermometer registers several degrees of frost, snow comes down light and dry; but in moist, cold weather, when the temperature is only just below thirty-two degrees, the snow falls in large, partially thawed flakes, and occupies much less space where it falls than that which reaches the earth during the prevalence of a greater degree of cold.

325. Where is the largest obelisk in the world?

A great brownstone monolith was among Wisconsin's contributions to the World's Fair at Chicago. This obelisk claims the title of being the largest on earth. The work was commenced with five steam channellers and about forty men in August, 1892, and for eighteen months the work was continued until the large pillar was worked out. The first proposition to furnish the monolith was for a stone just a trifle larger than the Egyptian obelisk at Rome, said to be the largest in the world, which is 105ft. 7in., exclusive of the foundation, and 9ft. square at the base. At first it was intended this monolith should be 106ft. in length and 9ft. 2in. at the base; but upon a later consideration it was decided to have it 115ft. long, 10ft. at the base, and 4ft. square at the top. The apex was 5ft. long, and tapered to about a 6in. tip. The entire monolith rested upon a foundation of granite 10ft. high and 12ft. square. The largest of the Egyptian obelisks now stands before the north portico of the Church of St. John Lateran, at Rome. Its whole height, including the base, is about 149ft. Its shaft was 105ft. in height, but has been rather reduced, owing to a portion at the lower part having been cut off in consequence of being fractured. Two of its sides at the foot are each 9ft. 8½in. long, and the other two are each 9ft. long. The shaft weighs about 445 tons. There are in existence rather

more than forty Egyptian obelisks. Of these, England possesses seven, America one, Germany one, France two, Italy (including Rome, which has twelve) seventeen, and Constantinople two. The remainder, many of which are fallen or broken, are still in Egypt. The smallest is the Lepsius Obelisk, in the Royal Museum at Berlin, which is 2ft. 1½in. high and weighs 200lb. The Luxor Obelisk at Paris is 76ft. 6in. in height. "Cleopatra's Needle," on the Thames Embankment, is 68ft. 5½in. in height; breadth, 7ft. 5in. and 7ft. 10in.; its weight is 186 tons. The highest monument in the world is that erected in the City of Washington to the memory of the first President of the United States. It was built by national subscription, and dedicated February 21st, 1885. The marble shaft rises 555ft. in the air—the base is 55ft. square, and tapers gradually until at the 500ft. point it is 34ft. 5½in. square. Here the pyramidal point begins, and is run to an apex 55ft. above the square masonry. The monument is said to contain 18,000 blocks of marble 2ft. thick.

326. Has a statue ever been sculptured in salt?

The Salt Union sculptured at Winsford, in Cheshire, a statue in salt, which was a reduced reproduction of the gigantic statue of Liberty, given by the French nation to America, which stands at the entrance to New York Harbour. The statue was exhibited at the World's Fair. It was carved out of solid white salt, and the height, including the base, was 12ft. 6in. The ornamental base, which was enriched with mouldings, panels, and inscriptions, stood upon a sub-base of rough amber-coloured rock salt—an imitation of the wave-worn rocks on which the original statue stands. The figure itself measured 5ft. 6in. high to the crown of the head, and the outstretched arm above it had an electric light at the end of the torch which it held. Chicago is said to have had another salt statue—a model of the figure of Lot's wife.

327. Which timber is the most durable?

Experts seem to be divided as to which of the two hard woods—Jarrah and Karri—of Western Australia is entitled to this distinction. Jarrah-wood piles, 2ft. 2in. square, driven thirty-three years ago at the Largs Bay pier, were found, on examination, to be as sound as the day they were put in. Some specimens of Karri-wood, taken from a fence near Albany, were recently sent to London, and though the wood had been underground for twenty-five years, it was perfectly sound. A specimen of Jarrah-wood under similar circumstances showed serious decay. Timber of the Tamarisk or

Shittem wood has been found perfectly sound in the ancient temples of Egypt in connection with the stonework, which is known to be at least 4,000 years old. In some tests made with small squares of various woods buried one inch in the ground the following results were obtained : Birch and aspen decayed in three years; willow and horse-chestnut in four years; maple and red beech in five years; elm, ash, hornbeam, and Lombardy poplar in seven years; oak, Scotch fir, Weymouth pine, and silver fir decayed to a depth of half an inch in seven years; larch, juniper, and arbor vitæ were uninjured at the expiration of the seven years. The red-wood of California has the quality of being nearly fireproof. The root of the brier is the only wood which does not burn when exposed to fire. Cocus-wood is the hardest known wood; oak is the strongest. The heaviest British wood is that of the box-tree, which sinks in water. Hornbeam is the strongest and toughest wood for mechanical use. The strongest American wood is the nutmeg hickory: the most elastic, the Tamar oak; the heaviest, the blue-wood of Texas. In situations so free from moisture that we may practically call them dry, the durability of timber is almost unlimited. The roof of Westminster Hall is more than 450 years old. In Stirling Castle are carvings in oak, well preserved, over 300 years of age. Scotch fir has been found in good condition after a known use of 300 years, and the trusses of the roof of the basilica of St. Paul, Rome, were sound and good after 1,000 years of service. Wood constantly wet in fresh water is quite as durable. Piles were dug from the foundations of the old Savoy Palace in a perfectly sound state after having been down 650 years. The piles of Old London Bridge were found sound and perfect 800 years after they were driven.

328. Does dancing take place in any of the European churches at the present day?

There are still two European churches in which the practice of dancing has survived—those of Seville, and Echternach in Luxembourg. At Seville it is customary on the feast of the Immaculate Conception, and of Corpus Christi, for the choir boys in the cathedral to dance during the elevation of the Host. A ballet is danced every evening during the octave of the feast before the high altar, by boys from twelve to seventeen years of age, in plumed hats and the dresses of pages of the time of Philip III. At Echternach Abbey church the dance is held on the feast of St. Willibrod. It consists of a dancing procession round the town to the abbey and into the church, where dancing takes place, and is witnessed by many thousands of people.

329. What is the age of the youngest organist ever appointed?

Eight years, that being the age of J. T. Freye, when he was in 1820 appointed organist of Saffron Walden Church, which position he held for sixty-four years. Albert Sherry, when between ten and eleven years of age, was appointed organist of St. Joseph's Roman Catholic Church, Goulden Street, Manchester. The United Presbyterian congregation at Melrose appointed Nichol Affleck, thirteen years of age, organist of their church, he having been selected out of a number of candidates. Master T. Sharples, of Worsley, thirteen years of age, was appointed organist of Christ Church, Patricroft, after competition.

330. Is any sermon still preached periodically in this country against duelling?

An annual sermon is preached in a church near Ledbury against the vice of duelling—in commemoration of a tragic event which took place in that locality many years since, when two rival lovers died fighting for a young lady's hand. This lady on her death left a certain sum of money to the vicar of the parish on condition that the interest should be paid to the poor, and a sermon preached once a year bearing upon the sin of duelling. During recent years, duels in England have been unknown, but they are still common in France, Germany, and Italy. In France, some 4,000 take place annually; fortunately most of them are bloodless. In Italy, during the year 1889–90, 2,759 were fought. In Germany, duelling is obligatory, especially in the army.

331. What is the freezing-point of gold?

According to an experiment recently made at the Royal Institution by Professor Roberts Austen, with his new pyrometer, the freezing-point of gold was found to be 1,045° Centigrade. Different observers have given the following temperatures as the melting-point of gold: 1,425° Centigrade, according to Daniell; 1,200°, according to Pouillet; 1,380° according to Guyton de Morveau. Riemsdigk is quoted by W. Roberts and Hilary Bauerman, two of the highest authorities on metallurgy, as concluding, after comparing these several results, that the point at which gold melts, and below which it becomes solid, is 1,240° Centigrade. Reducing this to the scale of the Fahrenheit thermometer, this melting-point is 2,264° of heat; whereas that of water is 32°; that of wax, 149°; that of lead, 626°; that of cast iron, 2,192°; and that of platinum higher even than that of gold, namely, 3,632°.

332. Does a race of Jewish negroes exist?

In Cochin, on the Malabar coast, there is a race of black Jews, completely like the native inhabitants. It has been thought that the blackness of these Jews is owing to intermarriages with Hindus; but of this there is not the slightest evidence. A German traveller informed the Rev. Dr. Phillips, a missionary in Northern Africa, that he had discovered a race of negroes, near the Kingdom of Bambarra, who are Jews in all their religious rites and observances. Nearly every family has the law of Moses written on parchments. Jews are found in almost every district and country on the face of the globe, and numbers have settled all along the North African coast, where, indeed, they have had communities for more than a thousand years, some having migrated there in consequence of Spanish persecution.

333. Where was the largest bunch of grapes grown?

In the vineries at Arkleton, where Mr. Dickson grew a bunch of grapes weighing 26lb. 8oz. when cut. At the Exhibition of the Royal Caledonian Society, in 1875, a bunch of the Raisin de Calabria was shown, weighing 26lb. 4oz.; on the same occasion was also exhibited a cluster of White Nice, only a few ounces lighter. At the Belfast Exhibition, in 1874, a bunch of Black Hamburghs weighed 21lb. 12oz. The finest vine in Europe is said to be 72ft. by 20ft., and has produced as many as 2,272 bunches of grapes, weighing 18cwt. The largest vineyard in the world is at Munroe Villa, Los Angeles County, and contains between three and four millions of vines. The largest grape-vine in the world is that at Oys, in Portugal, which has been bearing since 1802. It covers an area of 5,315 square feet, and the stem at the base measures 6½ft. in circumference. The great Hampton Court vine, planted in 1769, fills a house 66ft. long by 30ft. wide, and bears annually as many as 1,700 small bunches. Nearly twice the size is the vine at Cumberland Lodge, Windsor Park, which produces a crop of 2,000 bunches, averaging ¾lb. each. The Breadalbane vine in Perthshire covers a house 172ft. long by 25ft. broad.

334. What was the cost of the cheapest railway ever made in Europe?

One thousand four hundred pounds per mile; that being the cost of a line of railway which Mr. W. Lawford, M.I.C.E., constructed for the late Duke of Buckingham and Chandos. This line, which is eight miles in length, is made on the 4ft. 8½in. or standard gauge of this country. It is called the Wotton Tramway, but is, in fact, a light railway, and forms a

connection with the London and North-Western and Great Western Railways *viâ* the Aylesbury and Buckingham line. It is worked by locomotives specially constructed for the line, and the ordinary rolling stock of the two great lines above mentioned is used. A short line of railway was recently constructed in France at a cost of £1,432 per mile. The railways in the United Kingdom have cost on the average £44,710 per mile; those in the United States slightly under £12,000; while in Western Australia the railways have been built and equipped at a cost of about £4,400 per mile.

335. Who introduced round-arm bowling in cricket?

This distinction has been disputed by writers on cricket. There are two claimants for the honour. Mr. Knight, of Alton, introduced it according to Mr. Pycroft; while Dr. W. G. Grace awards the honour to Mr. John Willes, who lived at Sutton Valence (Bellringham). Mr. John Mynn, who at first strongly opposed this method of bowling at the Marylebone Cricket Club (M.C.C.), afterwards adopted it. The following inscription was placed on the gravestone, erected to Willes's memory, in Sutton Valence Churchyard:—

> To the memory of John Willes, Esq., of
> Bellringham, in this parish.
> Born 1777, died 1852, at Staunton, Gloucestershire.
> He was a patron of all the manly sports. First to introduce round-arm bowling in cricket.
> This memorial is erected by a few friends who remember him as a genuine sportsman, a staunch friend, a kindly neighbour, and a genial companion.

The introduction of round-arm bowling in cricket was also claimed on behalf of Broadbridge and Lillywhite. After it had been practised for eight or ten years, the Marylebone Cricket Club discarded it altogether, but it was revived about 1825.

336. In what part of the world is the most numerous-sided tower built?

At Seville, where is seen the Golden Tower, which has twelve sides. One of the towers at Ely Cathedral has ten sides, while octagonal or eight-sided towers are fairly numerous, the most noted of which is the celebrated Porcelain Tower at Nankin. The most curious in this country is the large, unfinished building on the summit of Chatham Hill, erected some twelve years ago by the Jezreelites. It is called the Tower of Jezreel, and consists of eight four-sided towers. It was intended to be for the accommodation of the 244,000 chosen people when the world is destroyed, it being built fireproof to insure their safety. One of the most peculiar towers in the world is the

Khuttab-Minar at Delhi. It is divided into five stories. The lowest story is 95ft. high, and consists of twenty-four faces in the form of convex flutings, alternately semi-circular and rectangular. In the second story, which is 51ft. high, these projections are all semi-circular; in the third story, 14ft. high, they are all angular; the fourth is a plain cylinder, and the highest is partly fluted and partly plain. Each story is divided from the next by an ornate gallery running round the tower. The whole is decorated with chapters from the Koran cut in low relief. A circular staircase of 375 steps leads up to the top, from which there is a grand view.

337. Where is there an entire race of people who are never sober?

The Ainos—a race who were probably the first inhabitants of Japan, but who, reduced in numbers, now live chiefly in the islands of Yesso and Saghalien—very nearly, if not quite, come within the above description. The whole population, old and young, are given to the immoderate use of their great drink, saké, which is excessively intoxicating and injurious. The entire race of natives in Brazil are said to be perpetually in a state of semi-intoxication on coffee; men, women, and children alike over-indulge, and to babies in arms it is given with a spoon. The effect is plainly apparent in shaking hands, twitching limbs, trembling eyelids, mummy-hued skins, and a chronic state of nervous excitability—worse than that produced by whisky.

338. How many different systems of shorthand are used by reporters in this country?

The systems chiefly in use amongst reporters in this country are four, namely: Pitman's, Mason's (Gurney's), Taylor's, and Lewis's. The returns for 1892 show that of 607 journalists attached to the staffs of the principal London and provincial newspapers and Press Agencies, 569 use Pitman's system, the remaining thirty-eight using nine other systems; while of ninety Parliamentary reporters, sixty-one use Pitman's shorthand system, twelve Taylor's, six Gurney's, three Lewis's, and the remaining eight use each a different system, so that probably there may be at least from twenty to thirty different systems in use by reporters in this country, though other systems than the four first-named find very few followers. Three societies represent the shorthand writers—the Phonetic, which held its jubilee in March, 1892, and issued a jubilee list of 5,098 members; the Shorthand, established 1881; and the National Phonographic.

339. Are early or late harvests in this country usually considered the most productive?

According to past experience in this country, early harvests have always been the most productive. An agriculturist in the Malton district of Yorkshire has recorded the dates at which he commenced corn-cutting during the past nineteen years. The earliest date was August 4, in 1887, the Jubilee year, when the yield was "over average," and the price 35s. 1d. per quarter. The latest commencement was in 1879, when the cutting of the worst crop of modern times commenced on September 10th, and harvest was not completed till October 30th: the average price was 43s. 10d., and the imports of wheat and flour during that year were 59,500,000 cwt.—the largest up to that date. Cutting usually commences in that part of Yorkshire about the middle of August. The experience of farmers in other districts confirms the opinion that early harvests are nearly always much more productive than late ones.

340. Has straw ever been utilized as a substitute for cotton?

Yes, this has been done by a Japanese named Hatakeyama Sadakichi. This gentleman had for years been ardently seeking means of increasing the national products, and his efforts were in 1890 crowned with success, when he discovered a process for manufacturing cotton from straw. Repeated experiments showed that with a given weight of straw he could manufacture one-half of the same weight of cotton. Another peculiar substance utilized as a substitute for cotton is wood pulp. A Hungarian claims to have made a discovery which will revolutionize the textile industry. He asserts that he is able to spin ordinary wood pulp or cellulose into yarn, from which all sorts of textile tissues can be made in the ordinary way, equalling in appearance, durability, and fastness of colour the best cotton goods.

341. Where is the finest work in bronze in this country?

The colossal lions at the foot of the Nelson Monument in Trafalgar Square, London, are usually admitted to be amongst the finest works in bronze in this country. They were designed and modelled by Landseer, the greatest painter of animal life this country has ever produced. In the centre of the area before the Town Hall, Liverpool, is a superb group of bronze statuary, supposed to be the largest in the kingdom, to commemorate the death of Lord Nelson. The nation possesses the two magnificent life-sized Italian bronze busts of the Popes Clement VII. and Sixtus V., which were bequeathed

to them by the late Mr. Henry Wilkinson, of White Webbs Park, Enfield. These busts, probably two of the finest Cinquecento bronze work in the country, were purchased some thirty years ago for £1,200. He refused during his lifetime several thousands of pounds for them, and they are at the present time of very great value. Mrs. Wilkinson, waiving her life interest in them, handed them over to the South Kensington Museum. The bronze equestrian statue of Louis XIV., erected in 1699 in the Place Vendôme, Paris (demolished 10th August, 1792), was the most colossal bronze statue ever made, containing 60,000lb. weight. The bronze gates of San Giovanni, Florence, are said to be the finest works in bronze in the world. These gates, by the celebrated sculptor Ghiberti, have been called by Michael Angelo "The Gates of Paradise."

342. What is the highest salary paid in the Indian Civil Service?

Upwards of £10,000 a year, each of the three Governors of Bengal, Bombay, and Madras receiving that amount as salary, besides an official residence with allowances. Members of Council draw £8,000 a year, and the Secretary of Government at Bengal £3,600 per annum. All these valuable appointments are attainable by members of the Indian Civil Service, admission to which is gained by competitive examination open to all British-born subjects. In February, 1892, the following statistics of the salaries paid in the Indian Civil Service were stated officially in the House of Commons:—

Number of Officers.	Yearly Salaries £.	Held by Europeans.	Held by Eurasians and Natives.
27	5,000 and upwards	26	1
50	between 4,000 and 5,000	47	3
125	" 3,000 " 4,000	125	—
351	" 2,000 " 3,000	346	5
1,003	" 1,000 " 2,000	951	52
2,635	" 500 " 1,000	2,078	557
3,526	" 250 " 500	1,334	2,192
10,975	" 100 " 250	2,097	8,878

343. Who was the original "Jerry Builder"?

In the early part of this century the firm of "Jerry Brothers, Builders and Contractors," carried on business in Liverpool, and earned an unpleasant notoriety by putting up rapidly-built, showy, but ill-constructed houses, so that their name eventually became general for such builders and their work, first in Liverpool and afterwards throughout the whole of this country. The equivalent for "Jerry Builder" in America is "Buddensiek." A builder of this name used to

run up flimsy apartment-houses in New York. A row of these buildings collapsed before they were completed, burying several of the workmen under the ruins. Buddensiek was convicted of manslaughter, and sentenced to ten years' imprisonment.

344. Have sheep ever been employed as beasts of burden?

In the northern parts of India sheep are put to a use unthought of in European countries. They are made to serve as beasts of burden. The mountain paths among the foothills of the Himalayas are so precipitous that the sheep, more sure-footed than larger beasts, are preferred as burden carriers. The load for each sheep is from 16lb. to 20lb. The sheep are driven from village to village, with the wool still growing, and in each town the farmer shears as much wool as he can sell there, and loads the sheep with the grain which he receives in exchange. After his flock has been sheared, he turns it homewards, each sheep having on its back a small bag containing the purchased grain.

345. Which English soldier possesses the medal with the greatest number of "clasps"?

Amongst soldiers actually serving, Lord Wolseley wears the greatest number of clasps—one for the Crimea, two for China, two for the Indian Mutiny, two for South Africa, and seven for Egypt—total, fourteen, exclusive of medals, stars, and other decorations. The British war medal having the greatest number of clasps, namely, twenty-eight, is that known as the Peninsular Medal. It was granted in 1847 (struck and presented in 1848) to the surviving officers and men of the Army and Navy who had taken part in any of the victories obtained over the French, in various parts of the world, between 1793 and 1814. The following are the clasps for the Peninsular War: "Roleia," "Vimiera," "Corunna," "Talavera," "Busaco," "Fuentes d'Onor," "Ciudad-Rodrigo," "Badajoz," "Pyrenees," "Salamanca," "Vittoria," "Nivelle," "Nive," "Orthes," and "Toulouse." Samuel Gibson, of the Inniskillings, who died about three years ago in the Caterham Asylum, having served in the Peninsular, had one of these medals with fourteen clasps. Another with fourteen clasps was held in his life-time by Peter Marsh, of the 95th, and was sold, after his death, for £23. One of the commissionaires has a medal which has about an equal number of clasps, the chief ones being: "Alexandria" (bombardment), "El-Teb," "Tamaai," "The Nile, 1884-1885," "Abu Klea," "Kirbekan," "Suakin, 1884,"

"Suakin, 1885," and "Tofrek." Another commissionaire has the Afghan medal with six clasps, namely, "Kandahar," "Ahmed Khel," "Charasia," "Peiwar Kotul," "Ali Musjid," and "Cabul"; he also has the bronze star, given to the troops who took part in General Roberts's famous march from Cabul to Kandahar.

346. What is the highest price that has been paid in recent years for an advowson in England?

In 1891, an advowson of £2,400 a year and a house sold for £20,000. This living had been sold fifteen years previously for £15,000, but the income was then much smaller. Twelve thousand pounds was given by the member for Midlothian (Right Hon. W. E. Gladstone) on purchasing the right of presentation to the Rectory of Liverpool. A vicarage in Gloucestershire was recently included by an auctioneer in a list of Church-livings for sale, the price asked being £11,000. The income was stated to be over £1,200, and amongst other advantages to tempt a purchaser were given the following: "Prospect of early possession, newspaper, market, three dispatches and deliveries of mails, a chapel-of-ease, society very high-class—the Duke of Beaufort, Earl Bathurst, and Lord Suffolk residing in the neighbourhood." The advowson of the Rectory of Mileham was sold at East Dereham in 1891 (when the incumbent was forty-five years of age) for £450. It was stated that the advowson of that rectory had been sold twenty-seven years previously for £3,500.

347. What is the name of the youngest actor who performed the parts of old men?

Labathiel Pavy, a boy who died in his thirteenth year, was so admirable an actor of old men, that Ben Jonson, in his elegant epitaph on him, says, "The Fates thought him one, and therefore cut the thread of life." This boy acted in "Cynthia's Revels" and "The Poetaster," in 1600 and 1601. The poet speaks of him with interest and affection. William Farren, who was long known as "Old Farren," made his first appearance upon the stage at Plymouth when he was nineteen years of age. He then played Lovegold, the hero of Fielding's comedy of "The Miser." From that time down to his final retirement from his profession in 1855, when he appeared for the last time as Lord Ogleby, in a scene from "The Clandestine Marriage," he was employed in personating the aged, the doting, and the decrepit. At the present day Mr. John Hare is the "Grand Old Man" of the stage, not by virtue of the lapse of time, but because of the admirable, highly-finished studies of old men

which he has given to playgoers in the course of his professional career. Miss Kate Terry (Mrs. Lewis) at the age of three made her first appearance on the stage to sing a character-song as an old lady of ninety-five.

348. What is the "eye" of a storm?

By the "eye" of a storm is signified an opening between the storm clouds, giving a gleam of sunlight or at least a slight hope of improvement in the weather. The "bull's-eye" is a term applied to a small cloud which suddenly appears, seeming in violent motion and to grow out of itself, and soon covers the entire vault of heaven, producing a tumult of wind and rain. It has been observed that when the body of a storm passes over a place, the wind begins to blow moderately, and increases to a hurricane as the centre of the storm approaches; then in a moment a dead calm succeeds, to be subsequently followed, after the calm centre has been passed, by a renewal of the storm in all its violence, but now blowing in a direction diametrically opposite to what it had before. This happened in the Island of St. Thomas, on the 2nd of August, 1837, when the hurricane increased in violence till half-past seven in the morning, then perfect stillness taking place for forty minutes, after which the storm recommenced in a contrary direction. When the centre of the Bahama hurricane of 1866 passed over Nassau, the calm lasted an hour and a half, covering an area of twenty-three miles across.

349. In what part of the world are prisoners allowed to follow their trade outside the walls of the prison, returning there at sunset?

At Ceuta, a fortified port on the coast of Morocco, opposite Gibraltar, which belongs to Spain, and is used by the Spanish Government as a military and convict station. Mr. Lee Meriwether, of St. Louis, U.S., having been required, during his tenure of office as Commissioner of Statistics for the State of Missouri, to investigate the subject of convict labour, resolved to take advantage of a holiday trip to the Old World to examine several of the prison systems of Europe. He was impressed with the awful terrors of the isolation system pursued in Lisbon, while he was astonished and amused at the amount of freedom enjoyed by the convicts at Ceuta, where the prisoners do not work unless they pay a monthly fee for the privilege, and where they are at liberty to follow their trade outside the walls, provided they return to the prison at sundown.

350. Does a maze exist in the grounds attached to any private residence?

Yes, at Braemore, belonging to Sir E. Hulse. Braemore House is about eight miles from Salisbury, and is a fine mansion built in the Elizabethan style, in imitation of its predecessor, which was unfortunately burnt down in 1856. The estate has been in the possession of the Hulse family for many generations. It lies on the bank of the Wiltshire Avon, and includes a park which covers an extent of about 200 acres. A wooded hill stands behind the mansion, and near to it is a curious maze, which is one of the many relics of antiquity in which the locality abounds.

351. What official is called "the priest of the world"?

Lord Lansdowne, as Indian Viceroy, received, in 1892, a loyal address, printed on satin, from the spiritual head of the Hindus in Mysore, the Jugguth Guru, or Priest of the World. Attired in head-dress like a bishop's mitre of gold filigree work, studded with gems of enormous value, he travels about to collect his "pence" on a solid silver throne of great antiquity and exquisite art. A facsimile erection in gold he uses at his chief temple. The Viceroy made him the pleasant and safe reply that he would be treated with the same consideration as in past years. About the same time, garlanded and sprinkled with rose water, he was conducted in triumph through more than one of the great Shiva temples near Cape Comorin by the priests, preceded by the resident dancing girls. The Dalai Lama, who resides at Lhasa, in Tibet, also lays claim to this august title. He is the acknowledged head of the Buddhist Church throughout Mongolia. The literal translation into English of his title is "Priest of all the world, even to the uttermost limits of the ocean."

352. Where is the mountain of Opal?

This mountain is in Strömöe, the chief of the Faroe Islands, in the North Atlantic. This island is only twenty-five miles long by six or seven in breadth, yet in its small area it includes two wonderful mountains. One of these is known as the "Opal Mountain," because it contains much precious stone of the opal kind. The other is the Myling Head precipice, a headland 2,200ft. above the sea level, and perpendicular. Humboldt, the great traveller, has pointed out how very rarely rocks with a reputation for perpendicularity are really perpendicular. But the Myling Head Mountain positively hangs over the sea at its summit, so that you may watch the waves beating the base half a mile beneath you. There are some

remarkable opals in existence. One in the Vienna Museum, belonging to the Emperor of Austria, weighs 17oz., or 3,360 grains, nearly six times as heavy as the Koh-i-noor, and it measures 5in. in length by 2½in. in width.

353. In what capital was a church used for a General Post Office?

An old Augustinian church in Brussels, the capital of Belgium, was for many years used for the General Post Office. Since the erection of a new post office, opposite the Théâtre de la Monnaie, the use of the church for postal purposes has been abandoned. The site occupied by the General Post Office in London since 1829, and on which the present edifice was erected between 1870 and 1873, is that of the conventual church of St. Martin-le-Grand, founded in 700 and destroyed by the Great Fire of 1666. The building is rectangular, having frontages of 286ft. to St. Martin-le-Grand and Bath Street, and frontages of 144ft. to Newgate Street and Angel Street, and is 84ft. in height from the paving-line.

354. What European Government (1893) has had the most frequent changes of Ministries?

The present Republican Government of France. Since 1870, when the Empire under Napoleon III. fell, while the United Kingdom has experienced only six changes of Ministries, France has had twenty-nine, the following becoming its Premiers in rapid succession at the dates given: 1870, Jules Favre; 1871, Dufaure; 1873, Duc de Broglie; 1874, General de Cissey; 1875, Buffet; 1876, Dufaure, a second time; 1876, Jules Simon; 1877, Duc de Broglie, a second time; 1877, General de Rochebouet; 1877, Dufaure, a third time; 1879, Waddington; 1879, Charles de Freycinet; 1880, Jules Ferry; 1881, Leon Gambetta; 1882, Charles de Freycinet, a second time; 1882, Duclerc; 1883, Fallières; 1883, Jules Ferry, a second time; 1885, Brisson; 1886, Charles de Freycinet, a third time; 1886, Goblet; 1887, Rouvier; 1887, Tirard; 1888, Charles Floquet; 1889, Tirard, a second time; 1890, Charles de Freycinet, a fourth time; 1892, Loubet; 1892, Ribot; and in 1893 there occurred another change, the Ministry, however, being reconstituted on January 10th under the same Premier, M. Ribot. Great Britain and Ireland has had thirty different Ministries since March 17th, 1801, being on an average a change of Ministry every three years nearly; the Ministry of longest duration during this period being that of the Earl of Liverpool, from June 9th, 1812, to April 24th, 1827, nearly fifteen years. The shortest was that of Sir Robert Peel, from

December 26th, 1834, to April 18th, 1835, only 113 days. The Ministry of George Canning existed only 134 days, from April 24th, 1827, to September 5th, 1827; and that of Viscount Goderich continued only 142 days, viz., from September 5th, 1827, to January 25th, 1828.

355. Has any newspaper ever appeared in this country without a name?

A London halfpenny paper, now called the 'Evening News and Post,' had this peculiar experience in January, 1888. In one of its earlier editions published during that month, it appeared with its usual title. but an injunction having been applied for and granted by Mr. Justice Kay, it came out later in the day as the 'Evening ——,' the black line representing the space where 'Post' formerly stood. In the last edition issued that day there was another change. The Court of Appeal had given leave to appeal, and temporarily suspended the injunction. The paper, in its latest edition, therefore, appeared once more with its name as the 'Evening Post.'

356. Who is the fastest speaker in the House of Commons?

Sir Balthazar Walter Foster, member for the Ilkeston Division of Derbyshire, is the most rapid speaker in the present House of Commons, his usual rate being about 200 words per minute. Lord Randolph Churchill speaks generally at the rate of 150 words a minute, but sometimes attains a speed of 180 words. A speech of his in the House of Commons has often occupied an hour and a half, and when printed verbatim, as it was in at least one instance, occupied five columns of a daily paper. Mr. Sexton, member for Kerry (Northern Division), is a fast speaker, and so is Mr. Dillon, member for Mayo (Eastern Division). Mr. Gladstone speaks distinctly and deliberately, averaging a speed of about 150 words a minute; while Mr. Balfour is slightly faster, averaging 160 words per minute. Mr. Joseph Chamberlain never speaks at a greater speed than 150 words a minute, and his average rate is only 120 words in that time. The slowest speaker in the House is Mr. Jackson, one of the members for Leeds. The most rapid English public speaker on record was, probably, the late Rev. Phillips Brooks, Bishop of Massachusetts, who spoke at the rate of 210 words a minute.

357. What is the most curious substance of which artificial teeth have been made?

Compressed paper, that being the material used by a dentist at Lübeck, in Germany, for the last seventeen years in manu-

facturing artificial teeth. A set of teeth made by him of compressed paper, which had been in use for more than thirteen years, was exhibited in Berlin. The teeth were in first-class order. The most curious materials employed for stopping teeth are probably coal, gum, glass, gutta-percha, and sulphur. Of all animal substances employed for false teeth, those of other human beings are the most durable, if sound and free from germs of disease. The teeth of oxen are perhaps the next best, but they generally betray themselves by being too white, and do not last for more than four years. The teeth of the hippopotamus are more durable than those of the elephant, and forty years ago a tusk of the former, that weighed 5lb., was bought for dentists' purposes at from £5 to £7 per pound; but the price has gone down as the demand has declined. It was found that the teeth of both animals inevitably gave the human breath an offensive odour.

358. Which religious festival has been attended by the greatest number of persons?

The various religious festivals in India probably gather the greatest number of pilgrims and visitors. Allahabad, "The City of God," situated at the confluence of the two sacred rivers, the Ganges and Jumna, is visited by large numbers of pilgrims throughout the year for ablution at the sacred spot, which they believe cleanses them from all past sins. At the great religious fair, held there in December and January, which lasts a month, some 250,000 persons are present. On the occasion of the Car Festival connected with the worship of Jagannatha, or "Lord of the World," held annually at Juggernaut, E. I., there are generally 100,000 pilgrims present, who make gifts to the value of £37,000. There are twenty-three other festivals held in honour of the same deity throughout the year, attended by 50,000 to 80,000 pilgrims. At Hardwar, or "Vishnu's Gate," a town situated where the Ganges emerges from the Himalayan mountains, a great religious fair takes place, at which upwards of 100,000 pilgrims attend. On every twelfth year a special festival takes place—the last occurred in 1884—when from 300,000 to 2,000,000 are collected. At Benares, the "Holiest City of India," large numbers of pilgrims attend daily throughout the year from the most distant parts to bathe in the holy well of Mani-Karniki. On particular occasions upwards of 1,000,000 people visit this city.

359. Is there any country in which women are not permitted to appear on the stage?

In China this practice is absolutely forbidden, and all

female characters are taken by male actors dressed up as women. This is the case also over the greater part of Japan, but there are in that country two or three theatres where only women act. To such perfection have feminine impersonations in Japan by male actors been brought, that even those who are familiar with every article of disguise are unable to detect the slightest difference between the imitation and the reality. This is the result of a method of training, which was once so laborious and painstaking that the actors who followed it were compelled to renounce all the natural occupations and pursuits of the male sex, and devote themselves to a life of perpetual mimicry. Not only in the exercise of their vocation, but in the privacy of their houses they were accustomed to wear a modified form of feminine dress, to arrange their hair after the manner of women, and to perform those household duties which are usually undertaken by wives and daughters. The lines of study were so carefully subdivided that one class would devote themselves to the imitation of young damsels, while another would assume the guise of matrons, and a third would deport themselves as aged dames. These fine distinctions are not so strictly observed at the present day, there appearing to be a growing disposition to follow the lead of other nations in this respect, and it is quite possible that before many years are past male and female actors may be permitted to appear on the Japanese stage together.

360. Has any play-writer served as a policeman?

Mr. Joseph Worden, until quite recently a constable in the Blackpool Police Force, has written a play called "Our Coastguards," which has been received with favour at the St. James's Theatre, Manchester. Richard Hengist Horne is another playwright policeman. He served in this capacity in Australia. He was born about 1807, and when a young lad was sent to Sandhurst to be educated for the military service of the East India Company. In 1827 he produced "The Death of Marlowe" and "Cosmo de Medici," two dramas written upon the Elizabethan model; these were followed by "The Death Fetch" and "Gregory the Seventh." In 1848 he produced "Judas Iscariot," a miracle play, with poems. In 1852 he, with Mr. Howitt and others, emigrated to Australia, where, after undergoing great privations as a gold-digger, he became chief of the Mounted Police, and afterwards a Gold Commissioner. Policemen have earned distinction in other departments of literature besides that of dramatic composition. There are two constables in the London Metropolitan Police Force who have published volumes of poetry of considerable merit, and a

sergeant in the City Police some years ago published a "shilling shocker," which attracted a good deal of attention. Constable Charles Ashton, of Merionethshire, was the winner, on one occasion, of the £50 prize offered for the best unpublished work of research in any branch of Welsh literature. One or two members of the police force in Scotland have attained considerable distinction as writers of detective stories.

361. Where is the largest match factory in the world?

At Tidaholm, Sweden. The "Vulcan" match factory there is said to be the largest of its kind in the world. It employs over 1,500 hands, and manufactures daily one and a quarter millions of boxes of matches. The yearly output requires one million cubic feet of wood, 785,000lb. of paper, and 322,000lb. of rye-flour for pasting the boxes. One of the machines at this factory is capable of producing daily a million boxes of matches. The machine receives the raw material in the shape of blocks of wood at one end, and after a while gives up at the other the matches complete, neatly arranged in boxes, and ready to be distributed to all parts of the world. Recent statistics show the approximate yearly production of boxes of matches to be as follows: Russia, 14,423 millions; England, 12,235 millions; France, 11,523 millions; Germany, 10,250 millions; Austria, 8,689 millions; Italy, 8,230 millions. It is calculated that the various States of Europe, Asia, and America produce no fewer than 150 milliards of matches in a single year.

362. Who is the most famous one-armed violinist in the world?

Count Zichy is the most famed one-armed violinist in the world. The German Emperor is very fond of him, and much rejoiced in a piece of luck that lately befell him. Whilst looking over some of his mother's papers, the Count came across a document which declared that an immense amount of valuable gold and silver plate and other treasure was buried beneath the floor of one of the rooms in an old Austrian castle, which had once belonged to his family. The Government readily admitted his claim to look and see if this were true; in addition, the Emperor of Austria was so interested in the matter that he ordered two regiments of soldiers to be placed at the Count's disposal to assist in making the required excavations. Professor Unthan, who is without arms and hands, and who visits the principal music-halls in the kingdom, can do many things with his toes, including the playing of a violin, which he does very creditably. Armless artists are also to be found. F. J. B. Heler

lost both hands, but paints and draws with his mouth; Charles Felce, without arms, paints with his feet; Miss Biffin has no arms; Mr. Noel Masson has lost his hands by an accident, and uses artificial ones; Alexander Alexander, a Scotsman, has lost both his arms, but paints with his feet. He has passed several examinations, and received a prize from Kensington for excellence in art, and has exhibited two of his works. Aimée Rapin, a Swiss girl, born without arms, also paints with her feet.

363. What is the weight of the heaviest watch anyone has carried about with him?

The first constructed watches were generally large and heavy, none being less than the size of a dessert plate. Many famous watches were too large to be worn; such, for instance, was the watch belonging to the Emperor Charles V. (1530), which weighed 27lb. The watches of that day had a strong resemblance to the table clocks which they were eventually to replace. The case was a cylindrical box of metal, chased and gilt, with a hinged lid on one side to disclose the dial, and this lid was often pierced with an aperture over each hour, through which the position of the hands might be seen. In 1844 Messrs. Hart and Son, of Cornhill, made for the Sultan Abdul-Medjid a watch, which was the most costly and elaborate specimen ever produced by English workmen. This watch was 5in. in diameter, and was in a double case of 22-carat gold. It struck the hours and quarters, and, instead of a bell, wires were used for the striking part. The sound resembled that of a powerful and harmonious cathedral clock. The cost was 1,200 guineas.

364. Who is the only blind and deaf authoress?

Madame Bertha de Colonne, of Paris. In spite of her double affliction, a young architect fell in love with her and married her. They had one child, who died, and the mother was overwhelmed with grief. In the volume of poems which has made her famous her most touching verses are those in which she laments the loss of her little one, and in which she speaks of the days when she could see. She feels her deafness far more than her blindness, for when she lost her sight music became her consoler. The Queen of Roumania wrote the preface to her volume of poems. The late Miss Mary Meyter, of Bath, was deaf from childhood and blind in later life. In spite of these drawbacks she frequently contributed verses to the 'Bath Herald,' and published a volume of poems. The most distinguished blind authoress is Miss Alice King, daughter of the lately deceased John Myers King, vicar of Cutcombe, Somersetshire. She has been entirely blind from

seven years of age, and yet has been the authoress of thirteen works, as well as an active worker in her father's parish. She is not deaf, but on the other hand has learned by ear seven languages.

365. In what part of the world is there a naturally roofed lake?

Near Obdorsk, in Siberia. The lake is nine miles wide and seventeen miles long. In long-past times rapid evaporation of the water of the lake left great salt crystals floating on the surface. In course of time these caked together. Thus the waters were at length entirely covered. In 1878 the lake found an underground outlet into the River Obi, which lowered its surface about three feet. The salt crust was so thick, however, that it retained its old level, and now presents the curious spectacle of a naturally salt-roofed lake. On the Mangishlak Peninsula, in the Caspian Sea, there is a lake roofed over with salt crystals strong enough to allow man and beast to cross it on foot.

366. Is there any country in which a European is worshipped?

There is a sect in Orissa, in the Bengal Presidency, who worship Her Majesty Queen Victoria as their chief divinity. Colonel Graham discovered that Her Majesty was also an object of worship in the Temple of the Phodong Lama, at Tumloong, in Tibet. A sect in the Punjab worshipped a deity whom they called Nikkal Sen. This Nikkal Sen was no other than the redoubted General Nicholson, and nothing that the General could do or say damped the enthusiasm of his adorers. M. du Chaillu tells us that some of the African savages looked upon him as a superior being, and the South Sea Islanders worshipped Captain Cook as a deity — even when they had killed him and cut him into small pieces the inhabitants of Owyhee fully expected him to reappear, and frequently asked what he would do to them on his return. Lander in his Niger Expedition says that in most African towns and villages he was treated as a demi-god. Lord John Lawrence has been worshipped among the Sikhs in North-West India. Five years ago a man called Jurjung Tain, a district commissioner for the Russian Government at Grahigivsk, in the north-east point of Siberia, imagined he was a god. Subsequently he declared himself to be the chief divinity in the Yakutskan Pantheon. Divine honours were paid to him, and he was carried through the settlement daily. On special occasions he was accompanied by a wonderful procession, when he was carried by eight

richly-dressed men, seated in a richly-ornamented chair, which was adorned by the wings of partridges, bells, horses' tails, and ribbons, while before him was a band of dancers. His career, however, was a short one, for he was soon arrested by the military authorities and sent to Vladivostock, where he is now confined in a lunatic asylum.

367. Has any actor played every male character in a play under the same roof?

Such is the case with the veteran actor, Mr. Henry H. Howe, of the Lyceum Company, who can boast of having played every male character in "The Lady of Lyons," from the first officer to Claude Melnotte and General Damas, under one roof—that of the Haymarket. Mr. Howe has been on the stage for over fifty-nine years, first appearing as an amateur. His earliest important engagement was with Macready at Covent Garden. He joined the Haymarket Company in 1839, before the days of gas for lighting purposes at that theatre, and remained there forty years and nine months. Mr. Howe, after leaving the Haymarket, was for some little time at the Vaudeville and the Gaiety, and is now, and has been for thirteen years, with Mr. Irving. Mr. Howe has played with Macready, Buckstone, Benjamin Webster, Phelps, Charles Kean, and, in fact, with most of the distinguished actors who have appeared during the last fifty years on the British stage.

368. How many cab-shelters are there in London?

Forty-one. Many of these are 17ft. long by about 6½ft. in width; while others, and these the more recent erections, are slightly larger. All of them are divided into two compartments, the cabmen occupying the larger one; the other being a sort of kitchen, in which there is an attendant who supplies the cabmen with such food as they may require. It is rather more than nineteen years ago since the first of these shelters was opened by the Hon. A. Kinnaird, and at the present time some 4,000 cabmen patronize these forty-one admirable conveniences every day. The profit from the sale of food is in most cases sufficient to allow the attendant a comfortable wage, and enable him to pay a small weekly rent to the committee, which goes towards the repairing and decorative fund. On every cab-rank where a shelter is erected the best class of cabmen in the district establish themselves, and in connection with the various shelters, sick, provident, and benefit clubs are formed. It costs about £200 to place a cab-shelter complete on any of the stands. There are 45,000 cabs throughout the United Kingdom; London alone has 12,000, earning 2½ millions sterling annually; the earnings of the whole have been estimated at

£8,200,000 yearly. About £8,000 per day is spent in London upon cab fares. Four-wheeled cabs cost from £70 to £80, and a hansom about £55.

369. Where is the first tree that was ever planted in Great Britain?

In the park of Tortworth Court, Gloucestershire, the seat of Earl Ducie, where the celebrated Spanish chestnut is said to have been the first tree that was ever planted in Great Britain by man. This Tortworth chestnut is now over 12ft. in diameter, was an old tree in the reign of Stephen, and was used to identify the boundary in 1135, being then known as the Great Chestnut of Tortworth. The Darley Yew of Derbyshire is about 1,350 years old; while the Ankerwyke Yew, near which Magna Charta was signed, is about 1,100 years old; the yews of Fountains Abbey existed at its founding, some 760 years ago; the yew tree of Fortingal Churchyard is said to be the oldest tree of its kind in the world; and the Greendale Oak of Welbeck, through which, in 1724, a way was cut, and a carriage and four driven through, is about 1,500 years old. One of the most ancient trees in Europe is the cypress of Somma, in Lombardy, which, according to an ancient record of Milan, was in existence in the time of Julius Cæsar, B.C. 42.

370. Has a newspaper ever been read at a distance of two miles?

About eleven years ago there was exhibited at a fashionable and scientific meeting at Knights Hill, Upper Norwood, a lens constructed by the Rev. A. W. Yarrow, M.A., B.C.L., whereby the letterpress of the London 'Times' was easily read when displayed from the terrace of the Crystal Palace. Subsequently it was tested with an equally successful result at a distance of 4,320yds., or nearly two and a half miles. The lens is expected to prove an efficient aid to photography and for military purposes.

371. Who invented the typewriter?

The first attempt at the construction of a machine that would do the work of the pen was that of an Englishman, Henry Mill, who, in 1714, took out a patent for such an instrument. The next recorded patent for a typewriter was granted in France, in 1841, to a blind man, Pierre Foucalt, whose machine being found practicable was used in several institutions in Europe. The first patent for working a machine upon the type-bar principle was that of A. H. Beach in 1856. The first practical machine was invented in 1867 by C. Latham Sholes, an American, assisted by S. W. Soulé

and Carlos Glidden. Soulé and Glidden left the concern long before the invention was fully worked out, so that the real credit in the matter belongs to Sholes, who persevered in the enterprise from 1867 to 1873, when he took his machine for manufacture on a large scale to Messrs. E. Remington and Sons, gunmakers, of New York, who put it upon the market as the Remington typewriter. For the further improvement of the machine Sholes was still largely responsible, for his services were retained by the firm until the time of his death, which happened only a few years ago. A typewriter, which measured only 4in. by 3in., and weighed less than 4½oz., was brought out in America five years ago. This tiny machine was furnished with all the letters and figures needed in usual correspondence.

372. Who first called the English "A nation of shopkeepers"?

The English were called "A nation of shopkeepers" by Napoleon I.; although he was not, as is generally supposed, the originator of the term. The first to use the expression in connection with the English appears to have been Adam Smith, who in his "Wealth of Nations" makes use of it; and it is more than probable that Napoleon borrowed the phrase from this source. Adam Smith was born at Kirkcaldy in 1723, and in 1766 his famous work entitled "Inquiry Into the Nature and Causes of the Wealth of Nations" made its appearance. In this work the author, referring to the English, says: "To found a great empire for the sole purpose of raising up a people of customers, may at first sight appear a project fit only for a nation of shopkeepers. It is, however, a project altogether unfit for a nation of shopkeepers, but extremely fit for a nation whose government is influenced by shopkeepers." Barère, on the 18th of June, 1794, in a speech to the French Convention, in which he asserted that Howe had been defeated in the famous battle of June 1st, said: "Let Pitt, then, boast of his victory to his nation of shopkeepers." In May, 1817, Napoleon I. is reported to have said to Barry O'Meara: "You were offended with me for having called you a nation of shopkeepers. I meant that you were a nation of merchants, and that all your great riches arose from commerce. Moreover, no man of sense ought to be ashamed of being called a shopkeeper."

373. Which perfume is most expensive?

The most expensive perfume in the market at present is the essential oil of rose petals, or otto of roses, £120 per lb. The essential oil of jasmine is quoted at £108 per lb.; ambergris,

£90 per lb.; musk, £84 per lb. In this country some £48,000 worth of perfumed spirits, fats, and essential oils is imported yearly, upon which 16s. 6d. per gallon is levied. The most powerful natural perfume is animal musk—and also the most permanent. In a single perfume distillery of Cannes there are used yearly 100,000lb. weight of acacia flowers, 32,000lb. jasmine blooms, 20,000lb. tuberoses, 140,000lb. rare flower leaves, and smaller quantities of other perfumes.

374. How many members of the present Parliament have published volumes of poems?

Several members of the House of Commons have done so, namely: William Abraham, member for Glamorganshire (Rhondda Division), who is a Welsh bard, under the title of "Mabon"; William Allan, the member for Gateshead, who is an engineer and poet, and whose works include "A Book of Songs in English and Scottish"; William Johnston, of Ballykilbeg, member for the Southern Division of Belfast, who is poet-laureate of the institution of Orangemen in Ireland; Professor Jebb, of Cambridge University, who has published translations into Greek and Latin verse; and T. D. Sullivan, member for the Western Division of Donegal, who has published a collection of songs. Sir George Otto Trevelyan published, in 1869, a volume of poems entitled "The Ladies in Parliament," and other pieces; and has also written many verses, dramatic and satirical, of which another of the best known is "The Dawk Bungalow." Henry Smith Wright has published the first four books of the "Iliad" of Homer in English hexameter verse. Mr. W. E. Gladstone, though he has not published a volume of poems, has written verses both in English and Latin, whilst among his papers is said to be a Greek tragedy, which may one day be sent out in book form. Mr. J. W. Crombie, member for Kincardineshire, is the author of "Some Poets of the People in Foreign Lands." Two members of the House of Lords have lately published volumes of poems, namely, Lord Houghton, "Stray Verses"; and the Bishop of Lincoln, "A Ladder of Heaven."

375. What is the biggest break ever made at billiards?

A break of 3,304, which was made on the 6th of November, 1890, in an "all-in" match at the Westminster Aquarium, between the champion, W. J. Peall, and C. Dawson, the latter receiving 3,000 start. This break included 1,061 spot strokes, made up as follows: 93, 3, 150, 123, 172, 120, and 400. In the same match Peall made breaks of 1,637, 1,494, and 1,322. The score at the close of the match was: Peall, in play, 15,000;

Dawson, including the 3,000 start, 5,680. On different occasions Peall has made breaks of 2,413, 2,170, 2,058, and 1,989. In a spot-barred game, the highest break—1,467—was made by T. Taylor in a match between him and H. McNeil in April, 1891. Taylor had, towards the close of the game, cleverly worked the balls into the jaws of the left top pocket, and won with an unfinished break of 373. Being requested to finish the break, Taylor continued to perform at the top of the table until he had compiled the extraordinary contribution of 1,337 (664 cannons), when an adjournment took place. In the evening Taylor continued playing until, after the marker called 1,694, he failed to hit the white, and his long innings came to an end with a grand break of 1,467, thus exceeding the previous best spot-barred break of 690 made by the champion, J. Roberts, the compilation including 729 consecutive cannons. Roberts, on the 2nd of March, 1893, in a match between himself and Peall, made a break of 737, which is one of the most remarkable made in the course of any spot-barred match, though Roberts, at his own house, has made a break (with spot barred) of 995.

376. How many species of fowls possess a five-toed foot?

The established variety of fowls that are called Dorkings, rendering famous the town of that name in Surrey, possess the well-known peculiarity of having at least five toes, instead of four, the number that belongs to the foot of an ordinary fowl. Sometimes the Dorking fowl has a sixth toe, springing laterally from the fifth, but always imperfect. Even the one extra toe is regarded as a monstrosity, and leads to disease of the feet. Dorkings, though rather delicate, are fair layers and good sitters. If of pure blood they are white, but many are now seen speckled with black or grey. Another feature of this breed is that sometimes the cocks have double combs. Some kinds of Brahma fowls have this same peculiarity, a variety so called from their being supposed to have been imported from the neighbourhood of the Brahmapootra River, which rises in Tibet and discharges itself in North-East India, near the mouth of the Ganges.

377. When was the first iron casting made?

Pausanias, a Greek writer, of Asia Minor, who lived A.D. 120, speaks of cast-iron statues. It was not, however, till the year 1700 that iron castings were introduced into England by Abraham Darby, an intelligent mechanic, who brought some Dutch workmen to establish a brass foundry at Bristol, having conceived the idea that iron might be substituted for brass.

This his workmen failed in doing. A Welsh shepherd-boy, named John Thomas, had some little time previous to this been received by Darby into his shop. While looking on during the experiments of the Dutch workmen, he said to Darby that he thought he saw where they had blundered in their task. He begged to be allowed to try his hand, and he and Darby remained alone in the workshop all night, struggling with the refractory metal and imperfect moulds. The hours passed on and daylight appeared, but neither would leave his work, and just after morning dawned they succeeded in casting an iron pot complete. For more than a hundred years after that night, in which Thomas and his master succeeded in making an iron casting in a mould of fine sand contained in frames and with air holes, the same process was practised and kept secret with barred doors and plugged keyholes. In India there are iron castings that were made centuries before the art was known in England. In the court of Kutub Minar, a tower of victory at Delhi, is a cast-iron pillar which one learned native attributes to the sixth century of the Christian era, but whose inscription is believed by high English authorities to belong to the third or fourth century A.D. The pillar stands 22ft. above ground, its total height is 23ft. 8in., its diameter at the base is 16ft. 4in., and that of the capital over 12in. In England the use of cast-iron dates at least only from the time of the invention by Darby and Thomas.

378. What is the most expensive material out of which a lady's dress has been made?

Pure gold and silver. The metals after being formed into exceedingly fine wire are woven into cloth, and afterwards made into dresses. These costly dresses are worn by the women of Sumatra. In Germany articles of dress are now being made of aluminium, and are advertised as "feather-light, silver-white wash goods, that will last for ever." The gold and silver tissue used in connection with some of the stage dresses at the performance of "Henry VIII.," at the Lyceum, is said to have cost sixteen guineas a yard. Some fur-trimmed dresses are exceedingly expensive. A cloak, presented by Lord Alington to his bride in 1892, which was trimmed with sable from specially selected skins, cost a thousand pounds. At the first Paris Exhibition, in 1855, Worth, the great milliner, exhibited a Court train of moiré antique, of which the ground almost entirely disappeared under embroidery in gold thread and pearls. A series of flounces in gold thread spread out in the form of a fan. Even then, when £50 was considered a high price for a lady to pay for a dress, this one

was valued at £1,200, and now would be set at a far higher figure. One of the gifts received by the Empress of Russia, on the occasion of her silver wedding, was an ermine mantle, the gift of the nobility of the province of Kherson, which cost £10,000 ; £3,500 has been paid for a lace robe by the late Mrs. John Jacob Astor to a Paris firm ; £5,000 was recently paid the same firm for another such robe. Lace at £40 the ounce, or ten times the price of standard gold, is one of the most expensive materials from which a lady's dress has ever been made. The cost of the fine hand-made thread from which Brussels lace is made is enormous. It is spun from flax grown at Hai and Rebecq-Rognon, and has been known to fetch the price of £500 per pound.

379. Is there any cat-breeding establishment in this country?

Mrs. Janet McBride, a resident of Perthshire, has for some time carried on such a breeding establishment on a moderate scale. Her stock consists of a pair of Angoras, two pairs of Persians, and a pair of tortoiseshells ; while some of their progeny, half-grown, are always kept on hand in case of any accident to the progenitors of the race. They are kept in a barn-like building, and the animals are lodged with extreme care and comfort. Each pair occupy a roomy compartment with wire-netting in front, sawdust and straw being used as bedding. Smaller compartments are provided for the tabbies when kittens are expected. Most of the kittens, especially of the Persians and Angoras, are bespoke before birth, and realize prices ranging from £4 to £6, according to age or sex. For the tortoiseshells higher prices of £8 and £10 each are obtained, and it is seldom that a litter is not all sold off two months after birth. No kitten leaves the establishment under three weeks old, and, as a rule, they complete the first month of their existence under the mother's care.

380. Does any metal expand as it cools?

This is one of the very remarkable qualities of bismuth. This metal expands to the extent of one thirty-second of its bulk as it cools, and this is availed of for alloying with type metal, for giving clear-cut edges, and also in taking sharply-cut casts of engravings, etc. Nickel-steel is also affected in this manner. If an ironclad, built in a temperate climate, of steel, and clad with 3,000 tons of nickel-steel armour, were sent on a voyage to the Arctic regions, the shearing which would result from the expansion of the armour by exposure to cold would destroy the ship. This discovery was recently made by Mr. Hopkinson. According to Leslie, brass is the

best reflector of heat. Reckoning brass at 100, others in proportion would be: silver, 90; tin, 80; steel, 70; lead, 60; amalgamation tin, 10; glass, 10; lampblack, 0.

381. Who sent the first public message ever transmitted through a telephone?

The first public message conveyed by the modern telephone was that transmitted on the 12th February, 1887, by its inventor, Professor Bell, when experimenting in public for the first time between Boston and Salem, U.S., eighteen miles distant from each other. The late Right Hon. H. C. Raikes, when Postmaster-General, sent the first public message ever transmitted through the telephone between London and Paris. The message was spoken on the 18th of March, 1891. In accordance with custom the first words spoken from the English side were the following: "And the Lord said, My voice shall traverse continents, islands, and seas. Thus have I promised it to My people for ever." A brief conversation then took place between Mr. Raikes and M. Jules Roche, French Minister of Posts and Telegraphs, after which Mr. Raikes communicated a message from the Prince of Wales to M. Carnot, the French President, and made a speech of congratulation and greeting into the ear of the French Minister, M. Roche, who replied in similar terms. Both speeches were in French. As far back as 1522 the principles of the telephone in a rude form were understood and put into practical use, as at the siege of Rhodes by the Turks, the English sappers by means of a distended parchment drumhead were able to ascertain the position of the enemy and the nature of their underground operations. It is known to have been in use some 3,000 years since, both in India and China, and a system of telephony exists among some of the most untutored peoples. The first idea of it in modern days was promulgated in 1609, and a book explaining the system was then published. Hook commenced to study the subject in 1661, and in 1667 he succeeded in transmitting sound by means of a distended wire. Wheatstone experimented in 1821, and succeeded in conveying the sounds of a musical-box from cellar to attic of his home.

382. Where is there a city on wheels?

On Saginaw Bay, an arm of Lake Huron, which is the second in area of the five great lakes on the frontier between the United States and Canada. This, the most curious city in the world, consists of wooden huts on wheels to the number of about 150, which, when the season arrives, are rolled on to the ice on Saginaw Bay, the population

numbering about 500. Each hut is furnished with cooking utensils, hammocks, and a stove, and is occupied by three men, whose business on the ice is that of catching fish. In the centre of each hut a hole, about a yard square, is dug to the water. A piece of pack-thread is fastened to a live herring, which is then dropped into the water. The fish darts away till pulled up by the thread, when it returns towards the hole, followed by a host of pike and other fish, desirous of feasting on the dainty morsel. The fishermen ply their harpoons on the hungry pursuers, and reap a rich harvest. Some of the huts can show two hundred or more fine fish at the end of the day's work. The most weird appearance of this city is at night, when the fishermen prosecute their work by the light of torches. Lake Huron has a mean depth of 250ft. and a maximum depth of 750ft., and abounds largely in fish.

383. In which civilized country is there an antipathy to railways?

In China, although it is believed that at last, even there, the Government have become convinced of the desirability, in the interests of China itself, of assenting to the extension of the railway system. A first attempt to introduce railways into the country was made by the construction, without the sanction of the Chinese Government being obtained, of a short line, from Shanghai to Woosung, twelve miles in length. It was opened for traffic on the 3rd of June, 1876, but closed again in 1877 and taken up, after having been purchased by the Chinese authorities. A small railway was afterwards constructed from the K'ai-p'ing mines for conveyance of coal to Hokou, situated on the Petang, which has since been extended viâ Taku to Tientsin, the whole making a length of eighty-six miles.

384. Which is the largest panorama picture ever made?

The panorama of London, which was exhibited at the Colosseum. It was taken from sketches made by Mr. Horner from the summit of St. Paul's Cathedral, and completed by him in 1829. It covered 46,000 square feet, or more than an acre, of canvas. The canvas of Niagara, lately exhibited in London, is 400ft. in length and 50ft. high, representing an area of 20,000 square feet. It was painted by M. Philippoteaux, in his studio at Harlem, about four miles from New York. There was some difficulty in getting it across the water, for the owners of the steamer informed the proprietor that the only place where it could be accommodated was on the deck, and that is how it came over, in one solid roll weighing eight tons. It took up the whole of the deck, and

cost £2,000 for freight. Some idea of the size of the building where the canvas was fixed may be gathered from the fact that Covent Garden Theatre, one of the largest in London, was not big enough to contain it. There was executed at Geneva, for exhibition at the World's Fair at Chicago, a panorama of the Bernese Alps, which is 51ft. high and 345ft. long. It cost £60,000, and the sketches for the painting were taken from the summit of the Mannlichen, which is 6,600ft. high. M. Philippoteaux's panorama of the Siege of Paris was 380ft. long and 50ft. wide, having some 20,000 figures depicted.

385. Who has the finest collection of water-lilies in this country?

Dr. Robert Faunce, of Sandwich, who, for some years past, has been extending the culture of water-lilies in his artificial ponds near that place. In 1893 he had no fewer than thirty-five varieties of the water-lily *(nymphæa)* and eight varieties of the lotus *(nelumbium)*, besides a beautiful pontidenia, or water hyacinth, and fine specimens of the Egyptian papyrus and the Carolina rice. Nearly all these plants flowered and fruited in the course of the year, and while frost was attacking the garden vegetables and unlucky cranberry beds of other districts, the Egyptian lotus, the Zanzibar water-lily, in various colours, and the magnificent hybrid water-lilies, with many other beautiful varieties, were blossoming in the open air at Sandwich. One of the finest collections of water-lilies in this country is to be found at Kew Gardens. This is closely approached by that at the Crystal Palace, Sydenham. The Duke of Devonshire owns a fine collection at Chatsworth, as also the Marquis of Bute at Rothesay.

386. In what country is elopement punished by death?

It is a custom among the Brahmans that when a woman runs away from her first husband, the king causes the unfaithful Brahman woman to be devoured by dogs in the middle of a public place, and her accomplice, if he is not a Brahman, is stretched upon a bed of iron heated over a fire. In China if a wife elopes from her husband she is sentenced to be whipped, and he may dispose of her as a slave. Should she marry another whilst her first husband is living, he is at liberty to have her strangled. Among the Kabyles, whoever carries off a woman and flees with her becomes a public enemy, and the village where the fugitives have taken refuge must give them up on pain of war. The man is put to death, and the woman is restored to her family, who do not spare her.

337. In what country are prisoners taken in war still sold?

In Afghanistan. The Ameer or ruler of that country had occasion not long since to put down a rising of the Huzara tribe, which had revolted. In doing so, about 1,000 male and female prisoners of war were captured, taken to Cabul, and sold like cattle at prices ranging from ten to twenty rupees each. In Burmah prisoners of war are treated in the most inhuman manner, being generally either put to death, sold as slaves, or thrown into prison.

388. Who invented the "penny-in-the-slot" machine?

Of the present popular "penny-in-the-slot" machines the first inventor in the field was Mr. Percy Everitt, who died recently at the Milwaukee Hotel, New York. The number of patents for this class of machines has, in recent years, been (for all manner of purposes) enormous. In England alone thousands of patents have been taken out in connection with slot machines. The automatic principle is a very old one. In the old Egyptian temples devices of this kind were employed for automatically dispensing the purifying water. A small coin (5 drachmæ) dropped into a slot in a vase set a simple piece of mechanism, like a well-sweep, in motion; a valve was opened for an instant, and a portion of the water permitted to escape. This apparatus was described by Heron of Alexandria, who lived 200 years before the Christian Era.

389. Which cathedral in this country has the finest crypt?

The undercroft, or crypt, of Canterbury Cathedral is of greater extent and more lofty (owing to the choir being raised by numerous steps) than any other in England. The extreme internal length of this curious and most beautiful structure is 230ft. from the western to the eastern end, and its breadth at the transept is 130ft.; this also is cruciform in plan, and the principal part, 83ft. 6in. from wall to wall, is divided into a nave and aisles by lines of short, massive pillars supporting low arches upon the same plan as, and forming a support to, the choir above. From the western extremity to the distance of 150ft eastward is the oldest part of the crypt. In 1561 it was given up by Elizabeth to a congregation of French and Flemish Protestant refugees, and a French service is still held there. The crypt of Glasgow Cathedral for elaborate designing and richness of ornamentation on pillars, groining, and doors, stands unrivalled amongst similar structures in Britain. Properly speaking it is not a

crypt, but a lower church, formed to take advantage of the ground sloping eastward. The picturesque crypt of Worcester Cathedral, remarkable for the multiplicity of small pillars supporting its radiating vaults, was described by Professor Willis as "a complex and beautiful temple." The crypt of St. Paul's is a large and magnificent church of the Decorated period, with a rich and intricate vault resting on a forest of clustered pillars, and served as the Church of St. Faith till the Great Fire. The crypt of St. Stephen's Chapel at Westminster formerly served as the Speaker's State dining-room, but has been restored to its former sumptuousness of decoration, and is now one of the most beautiful architectural gems in England. The crypt of Hythe Church is remarkable for its large and ghastly collection of human skulls and bones.

390. Apart from fiction, which class of books is most published in this country?

After fiction, educational, classical, and philological books are most published in this country. The 'Publishers' Circular' gives the following figures:—

Divisions.	1891. New Bks.	1891. New Edns.	1892. New Bks.	1892. New Edns.
Novels, Tales, and other Fiction ...	896	320	1,147	390
Educational, Classical, and Philological	587	107	579	115
Theology, Sermons, Biblical, etc	520	107	528	145
Juvenile Works and Tales.	348	99	292	53
Law, Jurisprudence, etc.	61	48	36	29
Political and Social Economy, Trade and Commerce ...	105	31	151	24
Arts, Sciences, and Illustrated Works	85	31	147	62
Voyages, Travels, Geographical Research	203	68	250	86
History, Biography, etc. ...	328	85	293	75
Poetry and the Drama ...	146	55	185	42
Year-books and Serials in Volumes	310	6	360	13
Medicine, Surgery, etc. ..	120	55	127	50
Belles-lettres, Essays, Monographs, etc.	131	123	107	32
Miscellaneous, including Pamphlets not Sermons	589	142	713	223
	4,429	1,277	4,915	1,339
		4,429		4,915
		5,706		6,254

391. Which potentate is known as "the Eye of the World"?

His Majesty Behanzin, the present King of Dahomey, is surnamed "the Eye of the World," also "the Son of the

Shark." This puissant monarch succeeded his father as King of Dahomey on January 6th, 1890. He is of medium height, and is a genuine negro of the most pronounced type—not the shiny black of the Yohlofs, but the dull black of the Bambarras and the Mandingues. He wears the native dress, the chocto, a kind of short drawers reaching scarcely to the knees, and over his left shoulder the acho is thrown. His low, narrow forehead is partly hidden beneath a thick woolly head of hair, which is turning grey, for Behanzin is in his fifty-second year. He has deep-set eyes, which roll slowly and inquisitively in their large orbits. His only indulgence in the art of improving his personal appearance is confined to rubbing his skin with a kind of cosmetic. He eschews ornaments of all kinds; he does not even wear, like the majority of his wealthy subjects, the traditional ear-rings.

392. Who was the first English book collector?

Benedict Biscop, who was born in 628, of a Northumbrian family. He assumed the tonsure in the Benedictine Monastery of Lerins, and became the first English collector of books. He made five journeys to Rome for the purpose of collecting books, and also gave commissions to various friends on the Continent to collect for him. After his return from his third visit to Rome he founded a monastery on the Wear, and endowed it with the numerous books he had collected. The Venerable Bede, a pupil of Benedict Biscop, was another great book collector, besides being a most indefatigable author.

393. What city in the world has been most often besieged?

Herat, one of the oldest cities in the world, and perhaps the most unfortunate. Herat was conquered by Persia in the sixteenth century; by the Afghans in 1715; by Nadir Shah in 1731; recovered by the Afghans in 1749. The Persians attempted to seize it in 1838; succeeded in doing so October, 1856; restored 1857. It was again seized by Dost Mahommed 1863; by Yakoob Khan, 1871. An old Persian historian says that Herat has been fifty times taken, fifty times destroyed, and fifty times triumphantly rebuilt. Since Constantine the Great founded a new metropolis on the Bosphorus, which he called Constantinople, it has undergone many sieges by Sassanians, Persians, Avars, Saracens (six times), Russians (in ninth to eleventh century), Latins, and Turks; and of its twenty-six sieges and eight captures, that of the Latins, under Baldwin and Dandolo in 1204, was by far the most disastrous, barbarous, and spoliating. Paris has

suffered eleven sieges, Antwerp seven, Belgrade seven, Naples six, Dantzic five, Philippsburg five, Tournay five. Amongst ancient cities Jerusalem was besieged, captured, or surrendered some thirteen different times. Rome has undergone similar vicissitudes fifteen times. The longest siege on record was that of Ashdod, or Azotus, which lasted twenty-nine years; this period has been disputed, other writers making it only nineteen. The siege of Candia (ancient Crete) by the Turks terminated after a period of twenty-four years, when the Venetians were defeated. The most celebrated siege in the history of the world is that of Troy, which continued for ten years.

394. What theatre has a gallery to which ladies only are admitted?

In South America every theatre is provided with a gallery wherein ladies alone are permitted to sit. In Chinese theatres a somewhat similar arrangement prevails. There are two Chinese theatres in San Francisco, the principal one being the Washington Street play-house. On entering one of these theatres, if a play is in progress the place is usually crowded by a horde of Mongolians, most of whom stand up, though there are plenty of seats. There is no distinction of location, and the coolie may occupy a better place than the merchant at the same price, providing he comes early enough. "First come, first served," is emphatically the rule. Up near the ceiling, on either side of the stage, are boxes for the accommodation of the women, who are not permitted to occupy seats with the men. The price of admission is a shilling for a Chinaman. A white visitor is charged two shillings, and is at once ushered on to the stage, where chairs are placed for his occupancy.

395. Where was the first equestrian statue erected in Great Britain?

In Whitehall, Charing Cross, London, the first equestrian statue ever erected in Great Britain, that of Charles I., was placed in 1678. This statue was of brass, cast by Le Sœur in 1633, at the expense of the Howard-Arundel family. During the Civil War, the Parliament sold it to John River, a brazier, of Holborn, with strict orders to break it to pieces; but he concealed it and ingeniously exhibited some broken brass as evidence of its destruction. After the Restoration the statue was in 1678 erected where it still stands, being placed on a pedestal executed by Grinling Gibbons. The best of the Royal statues in London, that of James II., by Gibbons, stands at the back of Whitehall Chapel.

396. Was wooden money ever used in England?

Wooden money, in the shape of Exchequer-tallies, was, prior to the establishment of the Bank of England in 1694, current in this country. Tallies was the name given to the notched sticks formerly in use in England for keeping the accounts in the Exchequer. They were square rods of hazel or willow, inscribed on one side with notches indicating the sum for which the tally was an acknowledgment, and on two other sides with the same sum in Roman characters. When the transaction was completed the tally recording it was split lengthwise, so that each section contained a half of each notch and one of the written sides. One half, called the tally or check, was given to the person for whose service it was intended; the other half, called the counter tally, was retained in the Exchequer until its corresponding tally should be brought in by the person who had last given value for it. It thus became a current token representing cash. After the establishment of the Bank of England, Government payments were made through its agency. The use of tallies in the Exchequer was abolished by Statute 23, George III. The old tallies were, by the Act 4 and 5 William IV., ordered to be destroyed, and it was burning them that caused the conflagration by which the old Houses of Parliament were demolished.

397. Has a clergyman in this country ever baptized anyone in the sea?

The unusual spectacle of the baptism of two men in the sea at Annfield, Newhaven, Scotland, by the Rev. D. Tait, of South Leith Baptist Congregation, was witnessed on a Sunday afternoon by about 3,000 spectators. The baptism was advertised to take place at half-past four o'clock, but at that time the water was not sufficiently far up upon the beach, and it was about five o'clock before the ceremony was performed. The minister, followed by the two men, came out of one of the houses at Annfield, and, crossing the roadway, descended the bulwark steps into the sea. It was observed that the minister was in black waterproof clothing, while the two men wore black trousers and white shirts. Taking one of the men by the hand, the minister led him into the sea about half-a-dozen yards, until both were almost waist-deep. Placing his other hand on the shoulders of the man he threw him gently backwards under water, and instantly helped him to regain his feet. He then led him back to the foot of the steps, and returned to the water with the second man, who was similarly immersed. All three afterwards ascended the steps, and returned to the house from which they came.

398. Who drafted the longest motion ever moved in the House of Commons?

Mr. Edmund Burke, who on the 4th of April, 1786, presented to the House of Commons the articles of charge which he had drafted against Warren Hastings, ex-Governor-General of India. They fill two volumes of the octavo edition of his works. They were accepted by the House of Commons, which demanded the impeachment of Mr. Hastings, and his trial upon these charges commenced at Westminster Hall before the Peers on the 13th of February, 1788. The trial continued during seven years, closing on the 23rd of April, 1795. Burke's opening speech in the case lasted four days and his concluding speech nine days. All his speeches on the motion and articles of impeachment and during the trial have been published, and display the impassioned eloquence for which he was so famed and all the resources of his rich and gifted mind. The hearing of the trial occupied 148 days, and at its conclusion Warren Hastings was acquitted by a large majority on every charge made against him.

399. Has a gravestone to the memory of a prize-fighter ever been placed in Westminster Abbey?

This was done in the case of John Broughton, champion prize-fighter of England, the gravestone to whose memory was erected in the west cloister of Westminster Abbey. Broughton, at his death, was verger of the Abbey, and no doubt it was owing to that circumstance, rather than to his prowess as a pugilist, that his gravestone was permitted to be erected in that historic edifice. Archdeacon Farrar, in a paper on epitaphs in the Abbey, mentions that of Broughton, and says that under the name a blank line was left for the inscription of the words, "Champion Prize-fighter of England," but the Dean and Chapter having scruples, such inscription was never added. There is only one woman buried in the Abbey: Mrs. Aphra Behn, dramatist; also one working man, Graham, a clockmaker. The cost of burial in Westminster Abbey used to amount to £150 or £160, besides the cost of extras, such as scarfs, gloves, etc. Through the exertions of the late Dean Stanley these charges were reduced to a maximum cost of £110 4s. 8d., and it can now be done for £20 less.

400. Who first employed pigeons to carry messages?

Pigeons have been employed in this way at a very ancient date, but there appear to be some differences of opinion as to who first so utilized them. Probably the first on record who employed pigeons in this capacity was Joshua, who, when

invading Palestine (in the sixteenth century B.C.), employed them as mediums of communication between head-quarters and camps in lands far on the other side of the Jordan. The Chinese are said to have used pigeons to carry messages at even an earlier date than this. The Greek poet, Anacreon, who lived 500 years B.C., mentions the use of pigeons as bearers of epistles. Pliny, the Roman naturalist, speaks of communications being kept up between Hirtius and Decimus Brutus at the siege of Mutina (Modena) by means of pigeons; and there is an instance recorded of their having been employed during the crusade of St. Louis. One writer has recorded the employment of pigeons to carry messages to Mahmoud Malek-al-Adel Nour-Eddin, Sultan of Egypt in the twelfth century. During the siege of Paris, 150,000 official messages were carried into the city by pigeon post. Carrier pigeons in calm weather fly on an average 1,200 yards a minute; with a moderate breeze in their favour they make 1,500 yards a minute; while with the wind strongly in their favour they attain a speed of 2,000 yards per minute. The record for distance is held by an American homing pigeon, which recently made a journey of 1,040 miles without a stoppage.

401. Has a negro ever received the Victoria Cross?

Three negroes have received this distinction. Seaman W. Hall, of H.M.S. *Shannon*, a negro, was decorated November 10th, 1857. He performed some remarkable feats of bravery in the Indian Mutiny. Private S. Hodge, 4th West India Regiment, was decorated with the Victoria Cross on June 30th, 1866, by his commanding officer, Colonel D'Arcy, who spoke of Hodge to his comrades as the bravest soldier in the regiment. Hodge greatly distinguished himself by bravery at the storming and capture of Tubabecolong, River Gambia. Corporal Schiess, Natal Native Contingent, received the Victoria Cross for bravery at Rorke's Drift, Zululand, January 22nd, 1879.

402. Which famous golfer had a figure of himself playing golf erected over his grave?

In the churchyard of the old ruined cathedral at St. Andrews, in Scotland, there is a monument erected to the memory of "young Tom Morris," on which is a bas-relief bearing a carved representation of the champion playing at golf. He was a famous golfer, though he died young, and this memorial was erected by his friends. He is known as "young Tom Morris" to distinguish him from his father, Tom Morris of St. Andrews, who laid out the golfing green

at Bideford, on the North Devon coast, in 1864. This monument, though not wholly unparalleled in its character, was certainly "a new departure" in associating "healthful play" with a sacred spot. The inscription on it was written by Principal Tulloch. There is at Edinburgh a monument which a golfer erected for himself. After the Restoration of Charles II. to the throne of England, his brother, the Duke of York, afterwards James II., was sent to Edinburgh, in 1681, as Commissioner of the King to Parliament. He was there challenged by two English gentlemen of his suite to play a match at golf against them for a very large stake, along with any Scotchman whom he might select. The Duke was judicious enough to choose as his partner one "Johne Patersone," a shoemaker, who no doubt was a local "crack" of the day. The Duke and the said Johne won easily, and half of the large stake the Duke made over to his humble coadjutor, who therewith built for himself the house which still bears the name of the "Golfers' Land," at 77, Canongate, Edinburgh.

403. What is the laughing plant?

This plant, says Palgrave in his work on Central and Eastern Arabia, is a native of that country, and its seeds produce on anyone eating them effects analogous to those of laughing gas. The flowers are produced in clusters, and are yellow in colour; the seed pods contain two or three black seeds of the shape and size of French beans. Their flavour is slightly like that of opium, and taste sweet, while their odour produces a sickening sensation. The seeds are pulverized and taken in small doses. Anyone taking them begins to laugh loudly and boisterously, and then sings, dances, and cuts all kinds of fantastic capers, the effect continuing for about an hour. When the excitement ceases the exhausted individual falls into a deep sleep, on awakening from which he is utterly unconscious of any such demonstrations having been made under the influence of the seeds of the laughing plant.

404. Which church in this country has the highest-priced pew rents?

The following are the annual revenues derived from pew rents in some of the most important places of worship: St. Peter's, Eaton Square, London, £2,000 a year; Christ Church, Paddington, £1,750; Portman Chapel, £1,700; Emmanuel Church, Hove, £1,400; Immanuel Church, Streatham, £1,210; St. Paul's, Knightsbridge, £1,200; St. Michael's Church, Chester Square, London, £1,200; St. George's, Hanover Square, over £1,000; Christ Church, Cheltenham, £1,000.

Two of the London West-end churches have higher pew rents than any other churches in this country, namely, All Saints', Norfolk Square, W., and St. Paul's, Onslow Square, S.W. In both cases the income of the incumbents is entirely dependent upon the pew rents received. In St. John's Wood Synagogue many of the pews cost the seat-holders from £12 to £15 per individual sitting, while in the Great Portland Street Synagogue the prices are said to range higher still. The country for big pew rents is America. In Dr. Talmage's tabernacle, where pews are let to the highest bidders, one valued at £18 ran up, under competition, to £150. Another, put up at £20, realized £151. Twenty pounds and upwards were common prices. In other churches of less note the prices range from £7 to £22 per pew.

405. Which private collector in this country owns the most valuable engravings?

Mr. John Malcolm, of Poltalloch, who is well known as the owner of the finest and most valuable drawings and engravings in this country, and who has some splendid specimens of the art of illumination. Mr. Malcolm has recently presented to the British Museum an illuminated MS. which the authorities of that institution vainly endeavoured to purchase for £2,000 many years ago, before it was acquired by the present generous donor. It is a "Book of Hours," illustrated with a profusion of full-page miniatures, of almost unequalled beauty of colour and draughtsmanship, by artists of the Milanese School between the years 1490 and 1520. Its decoration appears to have been begun about the former date for Bona, the banished widow of Galeazzo, and was finished thirty years later for her grand-daughter, the second Bona. By her the book was taken into Spain, and ultimately presented to Philip II., having in the meanwhile been enriched by the addition of further fine miniatures by artists of the Flemish School. It was in Spain that this treasure was found and purchased for the English market, some thirty years ago, by Mr. F. C. Robinson.

406. Who, within recent years, has left the greatest number of wills?

The late Duke of Sutherland (whose testamentary dispositions became the subject of a suit in the Chancery Division of the High Court of Justice) left ninety-two wills, which have been deposited by his trustees and executors with the Probate Department of Somerset House. The last of the wills, made a few weeks before his death, charged his estates

with a jointure for the Dowager Duchess of £9,000 a year, and he left her a legacy of £100,000, to be paid within twelve months of his death; also the estate of Sideway, in Staffordshire, and a lease of Tittensor Chase (a residence near Trentham) for twenty-one years, as well as a vast quantity of furniture, plate, jewellery, pictures, and objects of art. The residue of the real and personal estate is left to trustees, who are to pay the income to the Dowager Duchess, who has power of appointment over the whole property, a wish being expressed in the will that this power of appointment may be exercised in favour of the family of the testator. A legacy of £12,000 is left to Miss Blair, daughter of the Dowager Duchess.

407. What have been the lowest barometer readings on record?

The lowest barometer readings on record in various parts of the globe are as follows: In London, a reading of 27·93 inches on the morning of Christmas Day, 1821, and over the British Islands generally; a reading of 27·33 inches, at Ochtertyre (near Crieff), on the 26th of January, 1884; and 27·12 inches at False Point, near the southern mouths of the Ganges, on the 22nd of September, 1885, this being the lowest authentic reading observed in any part of the world. In London, the barometer usually ranges between 28·70 and 30·70 inches. In Mr. Glaisher's various balloon ascents, his barometers registered at various heights as follows:—

Miles high.	Inches
1	24·7
2	20·3
3	16·7
4	13·7
5	11·3

Mr. Glaisher therefore estimated for a height of 10 miles 4·2 and for 15 miles 1·6 inches.

408. What is the highest fee ever paid for retaining a counsel?

Retaining fees to counsel are small, and the following are the latest revised rules, issued in 1892, as to the amounts of such fees: "The fees for general retainers are as follows: In Parliament (Committees), ten guineas; in all other cases, five guineas. The fees for special retainers are as follows: In Parliament (Committees), five guineas; in the House of Lords and Privy Council, two guineas; in all other cases, one guinea." The biggest fee on brief was paid to ex-President Grévy, of France, in the great Dreyfus Guano lawsuit.

It amounted to £40,000. Serjeant Ballantine received from the Gaekwar of Baroda a fee of 20,000 guineas to induce him to visit India in his defence. Mr. Paterson, in the famous case of Jotee Persand, had his brief marked with the sum of 100,000 rupees (£24,000), in addition to which he received refresher fees amounting to 10,000 rupees (£2,400). In a case which occurred on April 17th, 1893, Sir Horace Davey had 1,000 guineas marked on his brief; Mr. Haldane, Q.C., 500 guineas; and a junior 350 guineas, and the case was settled in a few minutes before Mr. Justice Romer. Sir Charles Russell, five or six years ago at the Leeds Assizes, held a brief marked 600 guineas. His work occupied less than three hours, and he was thus paid at the rate of over three guineas a minute. The largest fee ever paid to a Scotch advocate was 1,000 guineas, for the defence of an action against Mr. Ross Winans, an American millionaire.

409. What is the greatest number of languages in which any one magazine is printed?

The magazine which is printed in the greatest number of different languages is the 'Acta Comparationis Literarum Universarum,' an Austrian semi-monthly review of comparative literature. This periodical has contributors in every part of the world, each of whose articles is printed in his native tongue. Sometimes thirty languages are represented in one issue. Another remarkable magazine is the 'Pantobiblion,' commenced in 1891, and published at St. Petersburg. It is an International Bibliographical Directory of Scientific Literature of the World, published monthly. One of the features of the 'Pantobiblion Magazine' is a series of critical articles on all printed publications of the world, each of such articles being written and printed in a language corresponding to the reviewed publication. The magazine is therefore printed in fifteen different languages simultaneously, namely, English, French, German, Italian, Spanish, Portuguese, Dutch, Swedish, Danish, Hungarian, Roumanian, Russian, Servian, Bohemian, and Polish. The 'War Cry,' the weekly organ of the Salvation Army, is printed in thirty different languages. Mr. Spurgeon's sermons were published in twenty-three different languages every week.

410. Have any famous thoroughbred horses ever appeared on the British stage?

On September 17th, 1892, Voluptuary, a thoroughbred horse, which won the Grand National Steeplechase in 1884, being then six years old, and carrying 10st. 5lb., appeared with other racehorses on the stage of Drury Lane Theatre.

This took place in a sporting drama, entitled "The Prodigal Daughter," the composition of Mr. Henry Pettitt and Sir Augustus Harris. One scene represented a steeplechase, in which trained racers took real leaps over real hedges on what seemed to be real turf. Mr. Leonard Boyne, as the hero, showed that he could ride as well as act. There was even a brook of water, through which a welsher was dragged by the infuriated mob who are represented as assembled to witness the running for the Grand National.

411. Is there any dome in this country made of paper?

The dome of the new Observatory at Greenwich is made of papier-maché. This roof, including the steel framework, is over twenty tons in weight; yet the whole was so constructed that it can be revolved almost by the pressure of the finger. The Palais de Justice of Brussels, recently completed, which cost upwards of two millions sterling — the finest building in Europe — is surmounted by an immense dome made of papier-maché, weighing sixteen tons. The largest domes yet constructed have been of iron. That of the Great Exhibition at Vienna was 360ft. in width; and the Albert Memorial Hall in London, an oval in shape, measures 219ft. by 185ft. in diameter. The largest existing domes are: The Pantheon at Rome, 142ft. diameter, 143ft. high; Baths of Caracalla, Rome, 112ft. diameter, 116ft. high; St. Sophia, Constantinople, 115ft. diameter, 201ft. high; St. Maria delle Fure, Florence, 139ft. diameter, 310ft. high; St. Peter's, Rome, 139ft. diameter, 330ft. high; St. Paul's, London, 112ft. diameter, 215ft. high; St. Geneviève, Paris, 67ft. diameter, 190ft. high. The oldest of these is the Pantheon, which was constructed during the reign of the Emperor Augustus.

412. Which circus rider has held in hand at one time the greatest number of horses?

Herr Edward Wulff, who in February, 1893, surprised the audiences attending the performances of his continental circus troupe at the circus in Argyll Street, London, by the ease and skill with which he controlled fifty horses in the ring at the same time, moving in circles in different directions. Herr Wulff at first stood on the summit of a raised stand in the centre of the arena, so as to be able to keep an eye on the whole of his equine performers. These, however, soon became so accustomed to their work as no longer to need such vigilant overlooking, and their trainer resigned his prominent position to a tiny pony, which travelled alone round the

limited space assigned him. The horses seemed quite eager to begin their respective circuits, and fell into prescribed order with as much regularity as though a groom were allotted to each, Herr Wulff simply remaining with the attendants, and giving the various signals to the steeds by a few words of encouragement, or by the crack of his whip. This display was certainly the greatest example of skill in training ever manifested, every horse having had to be taught his particular share in the performance.

413. What people regard gambling on one day of the year as a religious duty?

Among the Hindus gambling is regarded, on a certain day of the year, as a religious duty. This day, the Festival of Lamps, is celebrated in honour of Lakshun, the Goddess of Wealth. Then it is incumbent on every votary to try the chances of the dice, and from their success the prince, the chief, the merchant, and the artisan foretell the state of their coffers for the ensuing year. The chief female winners spend the whole money in buying sweetmeats or fruits, which are distributed among all the members of the family as a token of good luck for the year.

414. Who was the youngest English cardinal ever appointed?

Henry Stuart, Cardinal of York. This dignitary was born in 1725, and was created Cardinal of York in 1747, at the age of 22 years. Reginald Pole was born in March, 1500, in Staffordshire. He was the son of Sir Richard Pole and Margaret Countess of Salisbury, the daughter of the Duke of Clarence, and niece of Edward IV. He was made a cardinal by Pope Paul III., 22nd December, 1536, he being then 36 years of age. Charles Januarius Acton, born March, 1803, was created a cardinal in 1842, at the age of 39. He died January 23rd, 1847. Thomas Wolsey was created cardinal in 1515, at the age of 44; Nicholas Wiseman in 1850, at the age of 48; Edward Henry Howard in 1877, at 48; Thomas Weld in 1830, at 57; while John Henry Newman was 78 when created a cardinal in 1879, and Henry Edward Manning 66 when raised to the same dignity. In 1891 the youngest cardinal was Di Rende, then 44, who was barely 40 when he received his hat. Probably the youngest cardinal ever created was Giovanni de Medici, second son of Lorenzo the Magnificent. He was born in 1475, at Florence, and at the age of 11 he was made an archbishop by Louis XI., King of France, and at 13 was created cardinal. He was elected to the Papacy in 1513, under the title of Leo X., and died in 1522, at the age of 47.

415. Which swimmer has dived from the greatest height?

Larry Donovan dived from Niagara Bridge 200ft. into the water below, and also from Brooklyn Bridge, a height of 210ft. Professor Burns, a native of Liverpool (familiarly known as Tommy Burns), when serving as a middy in the old *City of New York*, made a dive from the topmost yardarm of the *Three Brothers*, the largest wooden vessel then on the seas—the height being 150ft. from the water. On the 9th of October, 1889, Burns dived from Runcorn Bridge into the Upper Mersey, a depth of 90ft., swam to the Liverpool landing-stage, a distance of 18 miles, came to London, dived off London Bridge, and went back to Liverpool. These dives were into deep water. The dive which Burns made daily at the London Aquarium was 100ft., from a tiny platform into a small tank, 18ft. long by 9ft. broad, and only 7ft. in depth. Professor O'Rourke, on one occasion when Burns was unable to appear on account of illness, made the great dive at the Aquarium, first from a third of the height, and, that having been successfully accomplished, from the full height of 100ft. He has since given performances exceeding that height by 30ft. Professor Jules Gautier has done some remarkable diving. On September 19th, 1890, he dived from the top of London Bridge at low tide, with both hands and feet manacled. On August 17th, 1892, he dived a clean header, with arms chained behind and feet chained together, 18yds. of rope being used to keep the limbs tight, from a raised platform off Folkestone Pier, a distance of 71ft. above the level of the sea. On September 23rd, 1892, he dived over 100ft., manacled, from the upper top-sail yard of the ship *Benvenue*, in the Channel off Sandgate.

416. Who owns the first photograph ever taken?

The Wedgwood family owns the first photograph or sun-picture (heliotype) ever taken. This photograph was taken in 1793 by Mr. Thomas Wedgwood, a son of the celebrated potter, Josiah Wedgwood. It is of a Savoyard piper in the costume of his country. There is a facsimile of it in a book entitled "A Group of Englishmen," by the late Miss Eliza Meteyard, published by Longmans, Green & Co., in 1871, and in a foot-note it is stated that "when the photograph was shown at a meeting of the Photographic Society, it was particularly admired by the late Lord Chief Baron Pollock, Bennett Wood-croft, and other members." The impression, though faint, was clear enough to be engraved some twenty-five years ago. One of the earliest photographs, taken by Professor Draper, of New York University, in the autumn of 1839, was

exhibited at Chicago. This photographic portrait of his sister was sent by the Professor, early in 1840, as a present to the late Sir John Herschell, by whose family it has been preserved to the present day, in exactly the same state in which it was sent to England. The loan of this interesting photograph for the Chicago Exhibition was made by Sir William Herschell at the request of the Chancellor of the New York University, transmitted through the American Ambassador in London. The lady of whom it is a portrait was then of the age of eighty-seven, and a recent portrait was exhibited side by side with the earlier one, thus enabling comparisons to be made as to the progress of the photographic art during the last fifty years.

417. Which members of our Royal Family have played in theatrical performances?

Their Royal Highnesses Princesses Louise (Marchioness of Lorne) and Beatrice (Princess Henry of Battenberg) played on the 27th of January, 1893, in Oliver Goldsmith's comedy, "She Stoops to Conquer," the performance taking place before the Queen in the India Room at Osborne, which had been transformed for the occasion into an excellent theatre. Princess Louise took the part of "Miss Hardcastle," while Princess Beatrice gave an excellent performance as "Miss Neville." The Marquis of Lorne took the part of "Tom Tickle," and Sir Henry Ponsonby that of "Jack Slang."

418. What is the largest number of churches in one churchyard in this country?

Three, in the town of Reepham, in the Aylsham district, in the county of Norfolk. One church, that of Hackford (All Saints'), is in ruins, having been burnt down with part of the town in 1600. The other two churches are those of Reepham (St. Mary's) and Whitwell (St. Michael's). Adjoining the Church of Reepham stands that of Whitwell, now used for Hackford and Whitwell. It is in the Later English style, and has an embattled tower. In the grounds of the Priory at St. Andrews, Fife, there are also three churches in one churchyard: First, the Cathedral; second, the ancient chapel of St. Regulus; and, third, the Church of St. Leonard's Priory. All these are in a state of ruin. There are many places in this country where two churches stand in one common burial-ground; the best-known examples being Westminster Abbey and St. Margaret's Church; the Churches of St. James and St. Mary, at Bury St. Edmunds; and Old and New Greyfriars, at Edinburgh. In these and a few other cases services are held in both churches. In numerous

other churchyards there are two churches, one in use and the other in ruins. Westbury-on-Severn, Overstrand, in Norfolk, and Heptonstall, in Yorkshire, are examples.

419. Which stone acts as a barometer?

A stone called "Semakuir," which is found in Northern Finland in considerable abundance, is a natural barometer, foretelling probable changes in the weather. In dry, fine weather the stone is of a dark grey colour mottled with white spots, but before approaching showers or thick mists it blackens all over—most conspicuously at the spaces which were previously white—and gradually returns again to its former state as the weather improves. Its prophetic warnings are regarded by many as having a supernatural origin, but a recent analysis of the stone shows that there is nothing whatever mysterious in its actions. It is composed of a ground mass of clay and fossilized organic matter, with a little rock-salt and nitre scattered throughout in grains and small patches. These salts absorb the aerial moisture as it increases in amount, and dissolve in it, forming black surface films, while they regain their white colour as the drier atmosphere evaporates the moisture from them.

420. Which King has the most valuable crown?

The King of Portugal. The jewels of this monarch's crown are said to be valued at £1,300,000. One of the costliest crowns in Europe is that worn by the Czar of Russia on State occasions. It is surmounted by a cross formed of five magnificent diamonds, resting upon an immense uncut but polished ruby. The coronet of the Empress contains the most beautiful mass of diamonds ever collected in one band. The crown of the Queen-Empress of Great Britain, valued at £300,000, contains one large ruby, one large sapphire, sixteen others, eight emeralds, four smaller rubies, 1,360 brilliant diamonds, 1,273 rose diamonds, four drop-shaped pearls, and 269 other pearls. In official dress, the Sultan of Johore wears — including his crown—£2,000,000 worth of diamonds. His collar, epaulettes, belt, cuffs, and orders blaze with diamonds. On his wrists are heavy gold bracelets, and his fingers are cramped with almost priceless rings. The handle and scabbard of his sword are a solid mass of precious stones. The most expensive Royal regalias in the world are those of the Maharajah of Baroda, India. First comes a gorgeous collar containing 500 diamonds, some as large as walnuts, arranged in five rows. Top and bottom rows of emeralds of equal size relieve the lustre of the diamonds,

421. Has a bridal dress ever been made into a priest's robe?

The Empress of Austria directed her bridal dress to be cut up and made into a set of priestly robes, which she presented to the Church of St. Matthew, at Pesth. The dress was of white brocade with silver threads, embroidered all over with beautiful garlands of roses in silver. Her bridal wreath encircles an embroidered picture of the Virgin, which is hung up in the Loretto Chapel of the same church, which the Empress selects for her devotions. It is no uncommon occurrence in the Roman Catholic churches of this country for a bridal robe to be made into an ecclesiastical vestment, while a clerical contributor informs us that he has known of several such cases in the Church of England.

422. In which country is liquor dispensed to consumers at cost price?

Under what is known as the Gothenburg Licensing System, in force throughout Sweden, no seller of liquor is allowed to make any profit on the sale. The sale of spirits is in the hands of the local authorities, who either appoint salaried managers to sell or lease to a company, which, after receiving 5 per cent. interest on their outlay, are bound to hand over any balance to the town authorities. The tariff of prices is fixed, and practically the liquors are dispensed at cost price. A somewhat similar system, known as the Bergen System, is in force in Norway. One of the chief differences between the two systems is in the disposal of the surplus, which in Sweden goes in reduction of rates, but in Norway is applied in assisting deserving charities, societies, institutions, or other objects of public utility dependent upon voluntary contributions.

423. Who was the youngest Poet-Laureate ever appointed?

John Skelton, who was born in Norfolk in 1460. He studied at both the Universities, and also at Louvain. He was created a Poet-Laureate by the Oxford Senate in 1489, when he would be twenty-nine years of age. He was permitted to wear a special robe of white and green, the King's colours, decorated with silk and gold embroidery, with the name of the muse of poetry worked upon it. Subsequent to 1630, the youngest Poet-Laureate was Sir William Davenant, who succeeded Ben Jonson. He was born in 1606 at Oxford, and was appointed Poet-Laureate in 1638, in the thirty-second year of his age. The earliest mention of a Poet-Laureate under that title occurs

in the reign of Edward IV., when John Kay received the appointment, though, this is believed to be the same office which was held as early as the reign of Henry III. by Henry de Averanches, who is styled "King's Versifier," and was paid 100s. a year by way of stipend. The oldest poet who has been appointed to the post was Wordsworth, Tennyson's predecessor; he was seventy-three, and only lived seven years after his accession. The appointment to the office of Poet-Laureate was for many years in the hands of Oxford University. It was not till the reign of Charles I. that the official appointment was created by letters patent. These letters assigned to the Laureate a salary of £100 a year, and a tierce of Canary wine out of the Royal cellars. The salary now attaching to the office is £300 a year.

424. Has any midnight flower show ever been held in this country?

In addition to the usual fruit and flower shows held by the Royal Botanic Society at their garden in the centre of the inner circle in Regent's Park, London, at which numerous prizes are given, their midnight summer flower show has of late years being a regular institution. The Cereus grandiflorus and the Cereus nycticallus, which last word, of Greek origin, signifies night beauty, of the cactus order of plants, open their flowers only at night, and are remarkable for size and beauty, one flower sometimes being as much as 1ft. in diameter. In 1830 there was a midnight exhibition of these plants at the Grange, Alresford, in Hampshire, the seat of Alexander Baring, who was created Baron Ashburton in 1835.

425. Has any native of the British Isles ever been raised to the highest rank in the Chinese nobility?

Sir Robert Hart, the Inspector-General of Chinese Maritime Customs, and Sir Halliday Macartney, K.C.M.G., Secretary to the Chinese Legation in London, have been thus ennobled, the Emperor of China having by Imperial Rescript raised their ancestors for three generations to the highest rank in the Chinese Mandarinate. It is believed that no other European has ever been honoured in this way. Among the Imperial rewards for military service established under the present dynasty the highest is the "Yellow Riding Jacket," called in Chinese Huang-Ma-Kua. The coat, according to regulation, is only to be worn when in attendance upon the Emperor. Two Europeans only have been honoured by receiving the right to wear the "Yellow Jacket." One of them was an Englishman, the late General Gordon, known as "Chinese

Gordon" ; and the other was the late M. Prosper Giquel. The Imperial decree—conferring on Gordon an order of the first rank and a gift of 10,000 taels of silver, in consideration of his services at Soochow—was presented to the British Museum, in 1886, by his brother, Sir Henry William Gordon, and is now on exhibition in the Manuscript Department, together with a map of the district around Soochow, drawn by Gordon, and marked with the dates of his successful campaigns. Gordon refused to accept the above and other sums of money from the Emperor. His characteristic reply was, "I shall leave China as poor as I entered it." General Gordon's chief European medical officer, Surgeon Joseph F. Longhead, late Royal Scots Fusiliers, was also highly rewarded for his services by the Chinese Emperor, being made a mandarin of the "Scarlet Button."

426. What is the greatest height ever ascended by a steeple-jack?

Four hundred and sixty-four feet, the height ascended in 1886 by a Styrian steeple-jack, named Joseph Pircher. The ascent was to the top of the pinnacle of the steeple of the Cathedral of St. Stephen, in Vienna, which is one of the finest structures in Europe. The steeple rises to a height of 450ft., culminating in a point on which stands a gilt cross, measuring, with the globe beneath it, another 14ft. Pircher descended, as he had climbed, by the lightning conductor, and his feat occupied altogether two hours and thirty-three minutes. He had previously climbed 130 steeples. The greatest height ever ascended by a steeple-jack in this country is 454ft. This ascent was made in 1892, and about nineteen years ago, by Ralph Hall, the steeple-jack, for the purpose of making repairs on the top of one of the tallest chimney-stacks in the world—that connected with the chemical works of Messrs. Joseph Townsend (Limited), Port Dundas, Glasgow. Another remarkable feat was recently accomplished in climbing 404ft. This ascent was made by the well-known English steeple-jack, William Green, for the purpose of repairing the top of the spire of Salisbury Cathedral.

427. Is any flight of steps in this country in more than one parish?

The steps leading from the south side of London Bridge into Tooley Street are in this singular position. The top of the steps belong to the Corporation of the City of London, and form part of the City, together with the bridge itself. The main body of the flight of steps is in St. Saviour's parish and

within the boundary of the St. Saviour's District Board of Works, while the bottom of the flight is in the parish and district of St. Olave's. In many parts of England boundaries become mixed, and it is not unusual to find houses, streets, and fields situated in two different parishes. One instance is at Beverley, in Yorkshire, where a house in Lairgate is so situated. On the annual ceremony of beating the bounds this house becomes a thoroughfare, as the officials have to pass through it to complete their peregrination. The wide, high flight of stone steps leading up into the Clarendon Building, which forms a conspicuous object in Broad Street, Oxford, stands in the two parishes of St. Mary the Virgin and of St. Mary Magdalene. A cross marks the boundary of these parishes in the front of the building over the steps, and the line that separates the two parishes crosses the building diagonally.

428. What is the highest price ever paid for a wedding-cake?

Nine hundred pounds, which was the price paid for the cake provided at the wedding of Mr. Astor, the American millionaire, to Miss Willing, at New York, about three years ago. Some very costly wedding-cakes have been made in the Royal kitchen of Her Majesty the Queen. That provided for the Princess Beatrice's wedding was said to be worth £300. It weighed 8cwt., was 9ft. in height and 5ft. in diameter. Six months were occupied in modelling the ornaments, among which were 1,800 sprays of sugared leaves of ivy, roses, honeysuckle, and other plants. It was conveyed to Osborne in a special van, and required twelve men to handle it. The one provided for the marriage of the Princess Louise with the Duke of Fife was also made by the Queen's confectioner, and was a most magnificent and costly cake. The cake made for Count Munster's wedding was said to be of great cost. It stood on a handsome silver plateau. It weighed over a hundredweight, and was built in two tiers, overtopping everything else in the room where the breakfast was held. The cake presented to Her Majesty Queen Victoria on the occasion of her Jubilee weighed over a quarter of a ton, measured 9ft. 6in. in circumference, and was 10ft. high.

429. What is the "flesh and blood" plant?

Early travellers in China and Tartary speak of "a plant of flesh and blood, with the shape and appearance of a lamb, having feet, head, and tail distinctly formed, and its skin covered with soft down." The "lamb" is said to grow upon a stalk 3ft. high, and to turn about and bend to the herbage

which serves for its food; and when the grass fails it dries up and withers away. There is some foundation for this queer story in the existence of a singularly shaped plant with a sort of woolly covering; and in order to heighten the general effect, the natives trim the plant and adjust the long, silky hairs that cover it in such a style as to give it the appearance of a wool-clad animal. The Potentilla Tórmentilla (the common tormentil) is known in this country as the "flesh and blood plant," the name being probably derived from its being administered to cure the disease of dysentery. According to Mr. Friend, the author of "Flowers and Flower Lore," apples, in some parts of the country, are named "flesh and blood" plants.

430. What was the largest picture ever exhibited in the Royal Academy?

The picture, "Joshua Commanding the Sun to Stand Still," by John Martin, which was exhibited at the Academy in 1816. One of the largest pictures ever exhibited in the Royal Academy was the famous portrait group of members of the House of Commons as assembled in Parliament. It was painted by Phillips, measured 28ft. by 17ft., and contained over 600 portraits. Another large picture was exhibited in the Academy of 1880. It was painted by Val Prinsep. It represents the Imperial assemblage held at Delhi by the Viceroy, Lord Lytton. The picture measured 10ft. by 27ft., and occupied nearly the whole of the east wall of Gallery VII. The largest paintings by any British artist are the frescoes of Maclise—each 45ft. long and 12ft. high—in the Royal Gallery of the House of Lords, depicting "The Meeting of Wellington and Blucher at Waterloo," and "The Death of Nelson," admitted to be the finest mural paintings hitherto executed in Great Britain. The largest picture in the world, exclusive of frescoes, is Tintoretto's "Paradise," hung in the Grand Salon of the Doge's Palace at Venice, which is 84ft. wide and 34ft. high. Michel Angelo's fresco on the ceiling of the Sistine Chapel of the Vatican measures 133ft. in length by 43ft. in width.

431. Which bird has the most variously coloured coat of feathers?

The king bird of paradise, which is found in a large part of New Guinea and the surrounding islands of the Malay Archipelago. Except on its feet, which are not feathered, there is no blue. The upper portion of the body and head is ruby red, shading almost into orange on the brow; its belly greyish white, next to which is a band of green, and then a collar of

yellow separates it from the crimson throat. From each side of the breast springs a tuft of greyish feathers, terminating in a broad band of intense emerald green, of which colour are also the glittering buttons suspended five inches from the tail and by what resemble slender wires, the wings being of various shades of yellowish brown. The bird with the greatest number of distinct colours in its feathers is the Pitta Concinna, which are abundant in the Malay Peninsula, but attain their maximum of beauty and variety in Borneo and Sumatra. These birds are described as having head, back of the neck, cheeks, chin, and stripe down the centre of the throat velvety black; from the nostrils over each eye a broad mark of deep buff, posterior to which is a narrower one of a pale glaucous blue; back, tail, and wings dark grass-green; lesser wing coverts and a band across the rump, glossy verditer blue; primaries and secondaries black, the fourth, fifth, and sixth of the former crossed by a band of white near their base, and all the primaries tipped on the external web with olive grey; upper tail coverts black; under surface delicate fawn colour, becoming much paler where it meets the black of the cheeks and throat; vent and under tail coverts fine scarlet. Other birds characterized by the splendour and colourings of their plumage are the peacock, the pheasant, and the humming-bird.

432. What is the deepest sea-sounding ever made?

Forty-six thousand two hundred and thirty-six feet, or just 36ft. over eight and three-quarter miles, the bottom having been reached at this immense depth in the South Atlantic Ocean, at a point midway between the Island of Tristan d'Acunha and the mouth of the Rio de la Plata. This is more than half as much again in depth as the highest mountain in the world. In the North Atlantic Ocean, south of Newfoundland, soundings have been made to a depth of 27,480ft., while depths of 34,000ft. are reported south of the Bermuda Islands. The deepest soundings in the Mediterranean yet made gave a depth of 14,136ft., at a point between Malta and Crete. The average depth of the Pacific Ocean, between Japan and California, is a little over 12,000ft.; between Chili and the Sandwich Islands, 15,000ft.; and between Chili and New Zealand, 9,000ft.

433. What is the greatest age at which an artist has painted a picture?

Tiziano Vecelli, commonly known as Titian, one of the greatest painters of the world, and the typical representative of the Venetian School, was born in 1477, died in 1576 at the

age of 99 years, and continued to produce pictures until the very last. Thomas Sidney Cooper, R.A., who was born in 1803, and is consequently 91 years of age, had a painting in the Royal Academy in 1893. John Massey Wright, a water-colour painter, born 1773, died 1866 at the age of 93 years, was fully occupied and in active work up to a short time before his death. John Christian Schetky, a marine painter, born 1778, died 1874, aged 96, exhibited regularly at the Royal Academy until 1872, when he was 94 years of age. Henry William Pickersgill, R.A., a portrait painter, born 1788, died 1875, at the age of 87, exhibited his pictures every year up to 1872, when he was 84 years of age. Philip Reinagle, R.A., born 1749, died 1833, aged 84, exhibited till 1827, when he was 78 years of age. His son, Ramsay Richard Reinagle, R.A., born 1775, died 1862, aged 87, exhibited up to 1857, at the age of 82. Sir John Gilbert, at 75, exhibited at the Academy in 1892 his picture, "Venetian Council of War." Mme. Rosa Bonheur, the famous animal painter, was 70 years of age, when she had finished the painting of her picture entitled "Horses Trampling Out Wheat." This splendid picture the artist considers her best. She refused £12,000 for it some time ago.

434. What is the annual expenditure on professional football players in this country?

A football player being interviewed as to the cost of the game said that, taking £3 as an average weekly salary, and an average of sixteen professionals to each principal club, the annual expenditure for football salaries amounts to an aggregate of £1,078,272 sterling, or nearly twice as much as the annuities of the entire Royal Family of this country, twice as much as the pay of the entire cavalry of the British Army, and five times as much as that of the three regiments of Foot Guards. In the Everton Club the expenditure for the year or season ending May 31st, 1889, included £2,059 1s. 11d. for players' wages: gratuities to players, £44 9s. 6d.; secretary's salary, £57; trainers' wages, £73 13s.; training expenses, £19 6s. 9d.; travelling, £702 8s. 10d.; medical expenses, £15 15s. 10d.; clothing and materials, £93 12s. 5d.; insurance of players, £29 5s.; making a total of £3,094 13s. 3d., out of the whole expenditure of £5,957 3s. 10d. At this rate the players in the fourteen clubs of the Football League only must cost £43,333 5s. 6d. a year, and the whole expenditure of these fourteen clubs amounts to £83,402 13s. 8d.

435. Where is the oldest health resort in the world?

This is Helwan, in Egypt, famed for its baths, which have been so well described by Dr. Frederick Peterson. There are

about a dozen springs, having a temperature of from 77deg. to 86deg. Fahrenheit, sulphurous, chalybeate, and saline. The bath-houses are commodious and luxurious. In Egypt is found the type of the warm and dry climate of low altitude. In winter the temperature by day is 70deg. to 75deg. in the shade. The nights are fresh and cold, and often accompanied by heavy dew. The mean annual humidity is about 58 per cent. The average annual rainfall for the last five years is 1·22in. The pyramids and mounds of ancient Memphis are in plain view across the desert, while Cairo, fifteen miles to the north, affords inexhaustible resources to the pleasure-seeker.

436. Which is the largest cross in any church in this country?

The "Great Rood," which the Duke of Newcastle has recently presented to the Church of St. Albans, Holborn. It is an enormous crucifix (the cross of which is over 25ft. in height), and hangs suspended from the chancel arch. The cross itself is coloured dead olive green, and the arms have terminals of fleurs-de-lis and Tudor roses. The Sacred Figure is painted and gilt, while on either side stand presentments of St. John the Divine and the Virgin as "the Mater Dolorosa." The idea of the work has been chiefly borrowed from the rood crosses to be seen still at St. Peter's, Louvain, and at Oplinter, in Brabant. Of crosses in churchyards, one of the largest is a remarkable specimen discovered in the parish of St. Teath, near Camelford, in Cornwall. In form it was Greek—that is, the four arms were of equal length. It was a massive granite monolith, and measured no less than 15ft. in extreme height; the upright shaft measuring in breadth at the base 21in. by 15in., and beneath the fillet immediately below the cross, 13½in. by 11½in.

437. Where is the most elaborately fitted coffee palace?

In the City of Melbourne, the capital of Victoria, and the largest city in Australia, where half a million sterling has been spent in erecting some of the finest and most elaborately fitted coffee palaces in the world. The principal one cost no less than £110,000. The Hon. James Munro, the Premier of Victoria, took a prominent part in establishing these magnificent coffee palaces, which are now such a feature of Melbourne life. The largest coffee palace in the United Kingdom is "The Victoria," at Leicester, erected by the Leicester Coffee and Cocoa House Company, Limited, at a cost of £20,000. This company opened its first house in 1877, two more in 1878, three in 1879, two in 1880, two more in 1882, one in 1883, one in 1885, and the "Victoria" in 1889, all of which have been

great successes. The first coffee palace in England, "The Edinburgh Castle," was opened in Limehouse in 1873, and in 1876 "The Dublin Castle" was opened in Mile End.

438. Which firm in the world owns the largest number of furnaces?

The Gas Light and Coke Company at Beckton, the largest gasworks in the world. There are a dozen retort-houses, some of which are 500ft. long, and each house has nine retorts—massive iron receptacles. Every retort has thirty furnaces, so that altogether there are no fewer than some 3,240 furnaces. It takes 5½cwt. to load a retort with fuel, and in six hours they are re-charged. The heat given off by these furnaces is so great, that if an ordinary house brick were used for building them, it would melt away in less than five minutes. Special fire-bricks have to be used, and 11,000 of them are needed to construct a single furnace. Every three years the bricks have to be renewed, for during that time they have practically been burnt to pieces. The firm owning the largest number of furnaces on the Continent is that of Krupp, the maker of the pieces of ordnance known as "Krupp guns." The works within the town of Essen cover more than 500 acres, one-half of which is under cover. They give employment to about 20,000 workpeople. The works contain 2,542 furnaces, 430 boilers, 83 steam hammers, 450 steam engines, and 1,652 machines for various purposes. They consume on an average 1,666 tons of coke and coal daily. Mr. Krupp owns 547 iron mines in Germany, and four sea steamers; and there are connected with the Essen works forty-two miles of railways, employing twenty-eight locomotives and 883 trucks; sixty-nine horses, with 191 waggons; forty miles of telegraph wires, with thirty-five stations, and fifty-five Morse apparatuses. This gigantic firm has turned out, at the works at Essen, over 21,000 Krupp guns, many of them being of enormous dimensions and weight.

439. Do tall or short people live longest?

The same causes tend to promote both longevity and stature, chiefly good food and fresh air. Thus the rural population is usually taller and heavier than that of towns, because in the country they breathe, especially in the daytime, a purer atmosphere. In Scotland, agricultural males are 4in. and 36lb. over the average of Glasgow and Edinburgh. The sea-coast fishing population of Yorkshire exceeds the Sheffield artisans by 3in. and 24lb. On the other hand, Londoners average 1½in. and 8lb. more than the population of Hertfordshire; and Quetelet observed the same in Belgium, which he ascribed to

better food in towns. In England generally, however, the average height of men between 22 and 25 years of age is: in the towns 67in., in the country 69in. But men in rural districts have the advantage in respect of longevity also. While men of all classes in this country, who reach the age of 20 years, have on the average nearly 40 more years to live, the farm labourer on the average lives 48 more years. The same result appears from a comparison of classes. The height of men of the professional class averages over 69in., while that of artisans is only about 66½in.; and so too, in the United States, where the labourer's average span of life is only slightly more than 44½ years, that of clergymen is 66 years, of lawyers 54 years, and of physicians 52 years. In extreme cases of height or shortness of stature, the shorter have the advantage, in support of which the following two, amongst very numerous cases, may be mentioned. The dwarf of King Stanislaus of Poland, who was only 23in. in height, died in Paris at the age of 90 years. Another diminutive Pole, Count Borolawski, who stopped short at 3ft. 3in., died at Durham in 1837 at the patriarchal age of 99 years.

440. Who owns the most valuable watch chain?

Sir R. Jardine, whose horse, Riversdale, won the Manchester Cup in 1886. The chain and watch to which it is attached cost £2,400. On one of the inner cases of the watch is a representation in enamel of the horse in question. The watch gives the time of day—by seconds and sections of seconds; and it is presumably intended to go on for ever without correction. Its great cost, however, is due more to outward adornment than to its intricate and complex internal machinery, and several huge diamonds were used in its ornamentation.

441. Has a tombstone ever been used as a shop-counter?

There is only one case on record in which this singular use has been made of a tombstone. A chemist in Leesburg, Va., dispenses his drugs over a counter which has been proved to be the original headstone from the grave of Colonel John Mason McCarty, who killed his cousin, General Armstead T. Mason, in a duel fought at Bladensburg, Md., February 6th, 1819. It is a plain and unpretentious-looking marble slab. The cause of the duel was an old and rancorous political dispute, which grew out of the campaign of Colonel Charles F. Mercer, who was elected to Congress in 1817, from London County, Va. In this dispute General Mason branded McCarty as a "perjured villain." McCarty was, according to the usage of the day, compelled to challenge General Mason

to mortal combat, and in doing so superseded his rights by stipulating his terms, conditions, and methods of the meeting. One of his methods was for them to jump together from the dome of the Capitol. This General Mason refused, with an intimation that he would accept a challenge sent in a proper form. Colonel McCarty, on the strength of the declension, posted General Mason as a coward, and was quickly challenged for doing so. He declined the honour on the ground that General Mason was wanting in courage. The matter rested until General Jackson appeared on the scene. It was then reopened by General Mason, who sent a challenge, and it was ultimately agreed that a duel should take place with muskets charged with a single ball, at a distance of 12ft. When in position the muzzles of the muskets nearly touched. At the word they both fired, and General Mason fell dead. The names of the seconds were never divulged. Colonel McCarty died in Chicago on September 1st, 1852. His remains were sent to Leesburg and interred. In 1856 they were removed to Richmond, and the headstone, bearing his epitaph in Roman letters, passed into the possession of a drug store.

442. What was the length of the longest public procession in this country?

Between three and four miles, on the occasion of the public or State funeral accorded to the great military commander and victor of Waterloo—the Duke of Wellington—on the 18th of November, 1852. His coffin was preceded and followed to St. Paul's by a large number of military, amid a vast assembly of spectators. After the Rifles, who led the way, had started, it was an hour and a half before the funeral car moved, and it was half an hour later when the rear of the procession started, the Rifles having then reached Charing Cross, nearly half a mile from the starting-place in Whitehall. The route taken was by way of Birdcage Walk, Apsley House, and Piccadilly. The procession was set in motion at 7 a.m., and it was three o'clock before the body was lowered into the vault, beside the remains of Lord Nelson, under the dome of St. Paul's Cathedral. The body was carried on a sumptuous car, drawn by twelve horses, richly caparisoned, and the coffin could thus be seen by all the spectators, who were estimated to number 1,500,000. The military in the procession consisted of the Household regiments of Horse and Foot Guards, the 2nd Battalion of Rifles, a battalion of Royal Marines, the 33rd Regiment, the 17th Lancers, the 18th Light Dragoons, the regiment of Scots Greys, a body of Chelsea Pensioners, and men of different arms of the Indian Army.

443. How many professional cricketers are there in the United Kingdom?

The "Cricket Annual" gives the names of 360 professional cricketers, eighty-one of whom have engagements with the leading clubs, and 279 with other clubs in different parts of the kingdom. This, however, does not supply the name of every professional, but only the names of those which have been sent for publication in the "Annual." Few are given for Scottish and none for Irish clubs, while a considerable number of English clubs having professionals are omitted. Taking these into consideration, there are at least 500 professional cricketers in the United Kingdom. Amongst the leading counties Surrey Club is credited with nine, Lancashire and Yorkshire with twelve each, and Notts with thirteen. Amongst other clubs, Sheffield United has the same number of professionals (thirteen) as Notts, and Sheffield Wednesday has three, so that the cutlery town possesses the services of more professional cricketers than any other town outside the Metropolis. The oldest professional cricketer mentioned in the "Annual" is William Mycroft, of the Derbyshire Club, who was born 1st February, 1841, and the youngest R. Bagguley, of Notts Club, born 10th July, 1873.

444. Which was the first novel published in this country with illustrations?

The second volume of "Robinson Crusoe," by Daniel Defoe, published on August 20th, 1719, was the first novel ever published in this country with illustrations. The illustrations consisted of a map of the world, in which the different voyages of the hero of the tale were delineated. The first volume of "Robinson Crusoe" was published in April, 1719, and became popular at once. A second edition was printed seventeen days after the first; twenty-five days later another followed, and a fourth was published on August 8th of the same year. On the 20th of August, the second volume was issued under the title of "The Further Adventures of Robinson Crusoe; being the second and last part of his life, and of the strange, surprising account of his travels round three parts of the globe. Written by himself. To which is added a map of the world, in which is delineated the voyages of Robinson Crusoe."

445. Which theatre has an electric curtain?

The Comédie-Française, the French national theatre, in Paris, where the Edison Company, assisted by M. Anton, chief machinist to the theatre, have recently installed a new drop-

curtain, raised and lowered by electricity. This curtain is described as being suspended by five parallel ropes, which run over an equal number of pulleys fixed above the scene, and are then wound together on a wooden drum, capable of turning in either direction in order to make the curtain ascend or descend. This movement is produced by means of a belt connecting the drum with an electric shunt motor and a counter-weight attached to the drum by a cord. The conductors of the current, which is derived from the Palais Royal station, come to a switch in reach of the machinist, who thus controls the motor and the curtain. The latter weighs 400 kilogrammes (about 900lb.), and is entirely balanced by counterpoise, so that the motor has only to overcome the friction of the apparatus, which amounts to about two-horse power. The brushes of the motor are of carbon, a device originally introduced by Professor Forbes, which avoids the strong sparks caused by metal touching metal. There are three speeds of descent and two of ascent. The descending speeds are 1·50 metres, 1·10 metres, and ·75 metres a second; and the ascending speeds 1·10 metres and ·75 metres a second. The range of the curtain is 9·60 metres. A current of from 10 to 60 amperes is employed. A system of electric bells to direct the machinist in working the curtain is also provided. The innovation is said to be in every way working satisfactorily.

446. Has a typographically perfect book of ordinary size ever existed?

It is believed that a typographically perfect book of ordinary size—a work by a standard author—has never yet been produced. The attempt has often been made, but has never succeeded. No matter how much care is taken, errors are sure to creep in somehow. The nearest approach to a typographically perfect book was, it is believed, attained by Dom Joze Souza, in 1817. This amateur spared no prodigality of cost and labour, and flattered himself that, by the assistance of Didot, not a single typographical error could be found in any of the copies of that splendid volume. But, alas! it was not to be, for a slight error of this kind was subsequently discovered in some of the copies, occasioned by one of the letters in the word *Lusitano* having got misplaced during the working of one of the sheets. Another famous attempt, with more surprising results, was made by a large Glasgow publishing house, which started with the avowed intention of getting out a perfect book. Every precaution against errors that could be conceived of was taken. Six of the most expert proof-readers in the United Kingdom were employed at a high salary, and

they carefully went over the proofs, devoting hours to each page. After they had discovered every error they could, the revised sheets were posted in the University, with an offer of £50 for the discovery of an error. Great crowds read the sheets, but no claim to the reward was made. Yet, notwithstanding all this, when the book came out no fewer than five errors were found on the first page. Perhaps the most carefully-printed works in this country are the Bibles sent out from the Clarendon Press, Oxford, and the University Press, Cambridge. In proof of this it may be instanced that positive exemption from error is claimed for an imperial quarto edition of the Holy Scriptures, printed at the former press.

447. Has any other bird than the pigeon been trained to carry messages?

Yes, the falcon; this bird having been trained to carry messages in the place of the pigeon, over which it has several advantages. A pigeon easily flies a hundred leagues at a speed of eight to ten leagues an hour; but a falcon can as easily cover fifteen leagues an hour for fifteen hours, whereas the pigeon can rarely accomplish such a feat. It is recorded that a falcon sent from the Canary Islands to the Duke of Lerme, in Spain, returned from Andalusia to Teneriffe, a distance of 250 leagues, in sixteen hours. The falcon can also support a heavier despatch, encounters fewer dangers from men or birds of prey, and is stronger against atmospheric accidents. Falcons are pre-eminent for boldness, keen sight, and muscular power. One of these birds traversed the distance between Fontainebleau and Malta, not less than 1,350 miles, in twenty-four hours; and their speed when in pursuit of prey is estimated at 150 miles an hour. Crows are said in ancient times to have been employed as carriers.

448. Amongst which people is marriage effected by transfusion of blood?

Westermarck, in his "History of Human Marriage," says that in many parts of India the bride and bridegroom are marked with one another's blood as a part of the nuptial ceremony. He refers to Sir John Lubbock's "Origin of Civilization," which instances especially the Birkhors, a curious aboriginal tribe, dwelling on the hills near Hazareebagh and Lohadugga, 220 miles north-east of Calcutta, as following this custom. This method is adopted also among the tribe of Dusuns, who live in the Island of Banguey, off the coast of North Borneo. Marriages among the Dusuns are performed

in the forest in the presence of the two families. There is no public gathering or feast. The rite consists in transferring a drop of blood from a small incision made with a wooden knife in the calf of the man's leg to a similar cut in the woman's leg. After marriage the man takes the bride to her home, where he resides in future as a member of the family.

449. What is known as the "needle and thread" tree?

A Mexican tree (*Aristotelia Maqui*) is so called, although, strictly speaking, it is an evergreen shrub, a native of Chili, which grows to a considerable size. It derives its popular name of needle and thread tree from the fact that its leaves are actually provided with needles ready threaded. It has large, thick, fleshy leaves, such as remind one of the cactus, especially of the one known as prickly pear. The needles of this tree are set along the edges of the leaves. In order to obtain one fully equipped for sewing, it is only necessary to push the "needle" gently backwards into the fleshy sheath, to loosen it from the tough outside covering of the leaf, and then gently pull it from the socket. If this operation is properly carried out, a hundred or more fine fibres adhere to the thorn. By twisting the "needle" during the drawing operation, the thread can be made of any length desired. The action of the air on the fibres toughens them amazingly, a thread from it not larger than ordinary No. 40 being capable of sustaining a weight of 5lb., about three times the tensile strength of common six-cord spool cotton.

450. Which lake contains the greatest number of islands?

Lake Huron, which contains upwards of 3,000 considerable islands, exceeds—so far as is known—all other lakes in this respect. This vast lake is the third in size of the five great lakes of North America, and has an area of 20,400 square miles; it is 6,000ft. above the level of the sea. The depth of Lake Huron is greater than that of any other lake in the chain, being probably not less than 1,000ft. average, while in certain parts of it 1,800ft. has failed to reach the bottom. The waters of this lake are extremely clear, the sun's rays passing through them as through a cloudless atmosphere. The largest islands in this lake are embraced in the Manitoulin group, which has a population of 2,000, chiefly Indians. The largest island of this group, the Great Manitoulin, has an area of 1,000 square miles. "Thousand Islands" Lake is an expansion of the River St. Lawrence, formed where it emerges from Lake Ontario. It contains 1,692 islands, the largest of which, "Wolfe Island," is ten miles long and six miles broad. The lake in the United

Kingdom having the greatest number of islands is Lough Erne, an Irish lake about fifty miles in length, and having 360 islands.

451. What percentage of Army pensioners is found in the workhouse?

Rather less than 1 per cent. The Secretary of State for War, Mr. Campbell-Bannerman, in March, 1893, in answering a question of Mr. Hanbury, member for Preston, stated that it had been ascertained that out of 63,000 pensioners, only 616 were in British workhouses. The War Minister, with reference to the granting of pensions, said that the conditions required for the grant of pensions up to the number of 100 in a year were that the applicants should have ten years' service, and should have a medal for a campaign before 1860, that they should be destitute, and that the pension should not be wholly claimed by guardians for maintenance.

452. Has a cannon ever been made from leather?

A number of leather cannon were most effectively used by the army of Gustavus Adolphus, at the Battle of Leipsic, on September 7, 1631. Their inventor was a Colonel Robert Scott, a Scotsman, in the service of Charles I. of England; they were constructed of hardened leather, and, on being experimentally tried, were pronounced superior to guns made of brass or iron. Colonel Scott did not live to see them tried in actual warfare, as he died shortly before Leipsic. These leather guns were found to be so easily carried, that a small battery could fly from one part of the field to another and be brought into action where most required—a great advantage over the heavy artillery of the period. Leather cannon, however, did not come into general use, because a way was discovered of making the metal ones lighter, and the greater durability of the latter gave them the superiority. Phillips related that a leather cannon was, on the 23rd of October, 1788, fired three times in the King's Park, Edinburgh.

453. Has any church living ever been held by a clergyman blind from birth?

The Rev. W. McGowan, who is totally blind, and has been so from birth, was recently presented to the living of Nevendon, in Essex. Mr. McGowan is considered to be a talented organist. The parish of St. Peter, Nevendon, or Newendon, in the Billericay district, is a small one in the Diocese of Rochester, and is pleasantly situated in a valley, from which it is supposed to have derived its name. The church is a small

and ancient one, comprising nave and chancel. Mr. William Fordyce, who has been blind since he was three days old, is a successful missionary at Quarff, in the county of Shetland, N.B., where he has successfully laboured for the last twenty years. He is also an active member of the Lerwick School Board. In April, 1858, a blind clergyman, the Rev. J. Sparrow, was elected to the benefice of St. Thomas of Acon, commonly called the Mercers' Chapel, being the chapel of the Mercers' Company, situated in Ironmonger Lane, Cheapside, London. The Rev. E. Stokes, fifty years rector of Blaby, Leicestershire, was blind from the age of nine, and died at the age of ninety-three. To the last he walked about the parish unattended, and used to hunt. A man always went with him on such occasions, however, and, when a leap was to be taken, rang a bell.

454. What is the most eccentric method of playing billiards ever practised?

That of a Frenchman in New Orleans, who has eclipsed all previous eccentricities in the game by playing billiards with his nose for cue. Recently, he played in this way several exhibition games in the presence of a large audience. The entertainment consisted of two games of 200 points each, and the nose-player beat both his opponents, and at the close was quite fresh and lively, the only noticeable change in his appearance being a slight redness at the end of his "cue." A game of billiards was once played on horseback at New York by two wealthy and eccentric Americans named Warrington and Lewis, the stakes being £1,000 a side, and the score 100 up. A billiard table was erected on a large platform in one of the public halls of that city, and at the hour appointed the two players rode up to the table on horseback. With their left hands they held the reins, and with their right the cue. The game lasted two hours. Some years ago a finger and thumb professional billiard player attracted some attention, but the interest was short-lived.

455. In what part of the country is the lowest price charged per unit for electric lighting?

At a recent meeting of the shareholders of the Newcastle-on-Tyne and District Electric Lighting Company, the chairman stated that the greatly increased winter demand had reduced their cost of production from 4½d. per unit to the remarkably low sum of 2d. per Board of Trade unit. In the parish of St. Pancras the supply is in the hands of the Vestry, who have fixed the price at 3d. per unit, which is equivalent to gas at

2s. 9d. per 1,000 cubic feet. Prices vary in different parts of the country, and must necessarily do so, until the companies can rely on a definite demand in fair proportion to the capability of the plant they have to provide. In Bradford the Corporation charge 6d. per unit; in Brighton and Dublin the price is 7d. In Leeds the Corporation charge 8d. per unit, but allow discounts, which make the net price paid, according to consumption, vary from 5½d. to 6¾d. per unit. In Liverpool the charge is made on a sliding scale, ranging from 4d. to 1s. per unit. The electric light at the British Museum is estimated to cost about 2s. 9d. per hour for carbon and 3s. 3d. for other charges, that is 6s. per hour for 18,800 candle-power, which, if produced by gas, would be about 15s. per hour.

456. Which country originated the selection of officials by means of competitive examinations?

China, where competitive examinations have been in operation for centuries. One of their triennial competitive examinations took place in 1891, at You-chang, on the Yang-tze-Kiang, the capital of the two provinces of Hoopeh and Hoonan, at which nearly 15,000 Bachelors of Arts assembled for examination for their degree, on attaining which they obtain appointments under Government. Competitive examinations as understood in this country for selection of officials were first introduced in India in connection with its Civil service. The 32nd section of the "Act for the Better Government of India" (1859) recognised the system of open competition which had been previously established for appointments in the Indian Civil Service, and provided for examinations by the Civil Service Commissioners. In a very limited form, competitive examinations existed in this country from about the same time, but it was not till 1870, by an Order in Council of the 4th of June in that year, that the system was made general as from the 1st of October, 1870. The number of Civil servants who obtain their appointments by this means reaches nearly 30,000, with an aggregate salary of four millions sterling, or an average of £130 per head.

457. Have sightless or feetless horses ever been recorded in this country?

The Orville mare, foaled in 1819, whose dam was Epsom Lass, produced a colt "born without feet," which, however, only lived twelve hours. Another Orville mare had already produced a filly "born without eyes." But eyelessness is, apparently, by no means so uncommon as footlessness. Lord Grosvenor's Plover dropped in 1822 an eyeless filly (by

Sovereign), that was engaged in several produce stakes, and was kept with a view of being trained, but was destroyed at three years old. Alexander Skerkoff, a Russian veterinary surgeon, reports the case of a deaf-mute cow, of Algava breed, belonging to a Russian nobleman, that has never shown signs of hearing nor been known to bellow. She tries to imitate other cows, stretching out her head and opening her mouth, but producing no sound. One of her calves, that lived but a week, had its tail directly between its eyes.

458. What is the longest time ever served in the Army by a British soldier?

Eighty-one years, that being the period served by Sir William Gomm, who died in 1875, at the age of ninety-one, by far the greater part of that time being spent in active service. The longest time served by a British soldier at present living is seventy-four years, by Field-Marshal Sir Patrick Grant, G.C.B., G.C.M.G., Colonel of the Royal Horse Guards, at present holding the position of Governor of Chelsea Hospital, to which he was appointed in 1874. Sir Patrick Grant, a native of Inverness-shire, was born in 1804, and entered the East India Company's service in 1820; his promotions being to Captain in 1832; Major, 1844; Lieutenant-Colonel, 1851; Major-General, 1854; Lieutenant-General, 1862; General, 1870; and Field-Marshal in 1883. He was Governor of Malta, 1867-72; and full Colonel of the Seaforth Highlanders, 1863-85. He saw a great deal of fighting in India, and was twice severely wounded. The oldest British soldier in point of age is Amos Jinks, a native of Newport, Shropshire, now living at Wellingborough, Northamptonshire, who is 107 years old. He served in the Royal Artillery, has been thrice married, and a few years ago buried a daughter eighty years of age. The oldest soldier in the German Army is Field-Marshal and Count von Wrangel. He was born in 1784, and joined the army in 1802. He is still living, with a service of ninety-one years.

459. What is the most valuable gift the Queen has ever received?

The gift of £215,000 which she received under the will of James Camden Nield, who died at Chelsea, in August, 1852. Nield was a miser, who never spent a penny that could be avoided. On one occasion he was an outside passenger by the stage coach, and his poverty-stricken appearance was such that his fellow-travellers at the stopping-place sent round the hat to pay for his refreshments, and their charity was accepted by him without compunction. He left the whole of his personal

estate, after payment of some small legacies, to Queen Victoria, for her own private use and advantage. Her Majesty paid each of the executors £1,000, and caused a stained-glass window and reredos to be erected to his memory in the parish church of North Marston, Buckinghamshire, where the greater part of his property was situated. The next most valuable gift was that made to Her Majesty on the occasion of her Jubilee, by the women of the British Empire, who presented her with £84,116, contributed by 3,162,256 women resident in all parts of the Empire. Ten thousand pounds of the sum provided a statue of the late Prince Consort, erected in Windsor Great Park, and the balance was transferred to the Nursing Institute.

460. Which church in this country has the largest choir?

That in connection with the Foundling Hospital, Guilford Street, London. Its music and services on Sundays have long been a special attraction, and the choir, which is composed of the greater number of the children themselves, has at various times been assisted by most distinguished singers. The average number of the children on the books of the hospital is about 500, of whom 300 are maintained at Guilford Street and the remainder in the country. Allowing for contingencies, the choir rarely consists of fewer than 200 children's trained voices, in addition to the four or five singers of repute. St. Paul's Cathedral has between forty and fifty men and boys in its choir, the lads being fed, housed, and educated. M. Gounod, the veteran French composer, and one of the foremost musicians, visited St. Paul's when he was last in England, heard the choir sing, and declared it to be the finest church choir in the world. Next to St. Paul's, of cathedral choirs, comes that of Durham. Mormon Temple, at Salt Lake City, has the largest choir in the world, being 300 strong.

461. Where is the heaviest swing bridge in Great Britain?

The Tower Bridge in London. When it is open for the passage of vessels, foot-passengers may still cross by a lofty footpath, to which access can be obtained by staircases and lifts within the towers. Its immense piers in the bed of the river are said to be the largest in the world. The total length of the bridge and its approaches is 2,640 feet. About 31 million bricks, 19,500 tons of cement, 70,500 cubic yards of concrete, and 15,000 tons of iron and steel were employed in the structure. It is built on the "Bascule" principle, and presents a novel feature in the centre span, which is 200ft. wide, and

cut in halves, which are raised and brought flush with the towers by machinery concealed within them. It cost the Corporation over one million sterling. Another heavy swing bridge is at Trafford Road, on the Manchester Ship Canal. It is 265ft. long, 30ft. deep, and 50ft. wide. The weight of each main girder is 230 tons, and the weight of the entire structure about 1,650 tons. A swing bridge 280ft. long crosses the Tyne at Newcastle. Its weight is 1,450 tons. The heaviest swing bridge in Scotland is that across the Clyde, opening into the Woodside Docks. It has one span 350ft. wide, and its total weight is over 1,200 tons.

462. Has a bridegroom ever forgotten his own wedding-day?

There has been more than one instance of this kind, though the case of the Rev. George Harvest is the most notable, as this clergyman was twice affected in that way. He was engaged to be married to a daughter of Bishop Compton, of London, and, on the morning fixed for his wedding, forgot all about it, and went on a fishing expedition. The indignation of the bride was such that she broke off the match. Mr. Harvest's second engagement was equally unsuccessful, and was broken off for a precisely similar reason. M. Pasteur, who was engaged to the daughter of a fellow-professor, did not turn up at the church at the time fixed for the ceremony. After waiting an hour, a search was instituted and the truant traced to the University, where he was found at work in his laboratory, having forgotten all about its being his wedding-day. Several bridegrooms, after having been married, have at once adjourned to work and forgotten all about their wedding. T. A. Edison's was a case of this kind. After the ceremony he went to his workroom, and got so engrossed in his work, that he entirely forgot the wedding and his newly-made wife, and did not return to his residence for forty-eight hours. John Kemble, the tragedian, on his wedding-night had to go to the theatre and play Hamlet. He became so absorbed that he forgot the matrimonial engagement he had entered into that day, and went off to his own rooms in the Temple.

463. What is the size of the largest postage-stamp ever issued?

Four inches by two. This is the size of the 5c. stamp of the United States. Its use was restricted to packages of newspapers and periodicals posted in bulk, and was never intended to frank letters. The penny Madagascar stamp, which comes second in regard to size, 3in. by 1½in., was used to prepay

postage on letters posted at the British Consulate at Antananarivo, where there was no other post-office at that time (1886). These labels were affixed by one corner only, and on arrival of the mail at Tamatave, they were torn off and the French stamp affixed instead. The French postal authorities at Tamatave used the torn-off labels as vouchers to collect the postage from the British Consul at Antananarivo. The private postage-stamp of Robinson and Co.'s Express, in the United States, with its figure of a bear, is 2¾in. by 1½in. The stamp entitled "California Penny Postage, from the Post Office, care of the Penny Post Co.," for 1885, is in size 2¼in. by 1¼in. The United States stamp was issued in 1865, and there were also denominations of 10c. and 25c. of the same size. The quarter-schilling stamp of Mecklenburg-Schwerin, which was issued in 1856, is undoubtedly the smallest postage-stamp ever issued. It is less than one-fourth the size of the current penny English stamp, and it would take about fifty of them to cover the surface of the largest stamp issued by the United States.

464. Where was the largest hotel in the world?

At Chicago, the city of the World's Fair in 1893. One of the new hotels erected in that city, to meet the wants of the immense flock of visitors, covered ten acres, contained 6,400 rooms, and was built in blocks, somewhat after the fashion of St. Thomas's Hospital, on the Thames Embankment, the whole being connected by a great central corridor. The buildings of the Hotel del Coronado, San Diego, cover five acres (exactly half the area of the Chicago Hotel), the grounds occupying another fifteen acres. The Palace Hotel, in San Francisco, was opened in 1875, and can accommodate 1,200 persons. It is 115ft. in height, has seven stories, and contains 755 rooms. Another very large hotel is the Grand Quarantine Hotel, in the Island of Flores, near the mouth of the River Plate. It accommodates over 1,000 visitors. The Hôtel Métropole, Northumberland Avenue, London, opened in 1885, is ten stories high, covers one acre of land, and can dine 1,000 people —500 of them each at a separate table.

465. Which church-living in this country has the smallest population?

The living or parish with the smallest population that is held by itself in this country is Yelford, near Witney, in the diocese and county of Oxford, which has a population of eight, the gross income being £102 and the net income £87. The rector is Charles Richard Powys, of Exeter College, Oxford, who was ordained in 1851; and the patron is E. K. Lenthall,

Esq., descendant of the William Lenthall who was Speaker of the House of Commons when Charles I. arrested the five members. There are other livings with populations about as small, but they are held in union with neighbouring ones Wilcote, in the diocese of Oxford, with seven inhabitants, of which Robert Lowbridge Baker, of St. Peter's College, Cambridge, ordained in 1856, is rector, the gross income being worth £75; but he holds it with Ramsden, that has a population of 433, and gross income of £19. Charborough, in the Salisbury diocese, with six inhabitants, and net income of £85, held by George Augustus Aldridge, with Morden, that has a population of 809, with net income of £140 and a house. Willersley, in Herefordshire, with eight people and net income of £49, is held by Rhys Bishop, with Letton, that has a population of 220, and gross income of £235 and a house. Of livings held singly, Angersleigh, near Taunton, Somerset, has twenty-six parishioners, the gross income being £128, the net one £121; the rector, Henry Herbert Bell, late scholar of Corpus Christi College, Cambridge, and Classical Honours in the third class.

466. Which legislative body fills its library largely with works of fiction?

The French Chamber of Deputies. Their librarian's bill for new books never falls below 22,000fr., or between eight and nine hundred pounds, most of which is spent on works of fiction. In the time of the Empire, and at the present day, novels were and are the books in the library chiefly read, and its shelves are packed with the works of Gaboriau, Paul Féval, Ernest Feydeau, Octave Feuillet, and others. The library is a delightful room, and the favourite lounge of the deputies. The French Chamber of Deputies costs the nation £815 per day, and is composed of 584 deputies (six for Algeria and ten for the Colonies), elected for five years by universal suffrage, in the proportion of at least one deputy for each district, or as many more as the population of the district contains hundreds of thousands of inhabitants.

467. In what part of this country is the most complete Druidical circle of stones found?

There is a circle of stones near Chipping Norton, 107ft. in diameter, of which there remain sixty stones, some of these being sunk in the soil to nearly their full height. There is a current saying in the locality that, owing to some charm, the stones cannot be counted, and there is little doubt that those who attempt it frequently disagree in the result. The circle near Keswick is 108ft. in diameter, and there are forty-nine

stones still remaining—thirty-nine in the outer circle and ten within the circle, forming an oval inclosure. At Stonehenge, of the circle only seventeen upright stones remain, with six of their lintels. Only two of the inner stones remain in their places. The largest circle in the days of the Druids was at Avebury, in Wiltshire. Dr. Stukely reports it as having originally consisted of 650 stones. It is surrounded by a broad ditch. Within the ditch was a circle 1,400ft. in diameter, formed of 100 upright stones, from 15ft. to 17ft. in height, and about 40ft. in circumference, placed at a distance of 27yds. from one another. Within this were two circles, each consisting of two double concentric rows composed of the same number of stones, and arranged in a similar manner. The grand circle had two entrances, consisting of double rows of 100 upright stones, each placed at equal distances, and extending a mile in length; the one terminating in a double concentric circle of smaller diameter, and the other having a stone larger than the rest at the extremity. Most of the stones of this vast structure have been broken down and used in the construction of houses in the village, and in repairing the roads.

468. Has any deaf-mute ever been ordained in this country?

The Rev. Richard Aslatt Pearce, of Homelands, Barnes, Winchester, was, in 1885, ordained a deacon in the Church of England that he might serve as a missionary to the deaf and dumb for the Diocese of Winchester, in Hampshire, and the Isle of Wight. He is married to the Hon. Frances Mary, daughter of the present Viscount Monck, a lady who is also a deaf-mute. In Dublin there is a deaf and dumb clergyman of the Episcopal Church of Ireland—the Rev. Mr. Hewston. He has been for years connected with a Deaf and Dumb Institute in the north side of the city. Another deaf and dumb clergyman was ordained in the United States. In that country there is a deaf-mute solicitor with a considerable practice, who finds no hindrance in coping with the legal difficulties of his numerous clients. America also boasts of two deaf and dumb editors. In this country a deaf-mute occupied for many years a high position at the Admiralty, with a salary of £1,000 a year.

469. What is the temperature of the hottest furnace ever made?

Three thousand degrees Centigrade. The oxy-hydrogen blow-pipe furnace of Sainte-Claire Deville produced a temperature of 2,000deg. Centigrade, or nearly twice the heat of

molten copper. Now, however, a furnace which gives a temperature 1,000deg. higher still has been devised by M. Moisau. The heat in Moisau's furnace is produced by electricity, the bricks of the structure being arranged in a manner suitable to the requirements of the apparatus. With a current of 30 ampères and 55 volts, a heat of 2,250deg. is obtained; but with 45 ampères and 70 volts, a temperature of quite 3,000deg. is produced and maintained. The material of the oven, even though it be made of the most refractory substance, is, by this fearful heat, melted on its inner face like oil. At this temperature, oxide of uranium, which cannot be reduced at the highest heat of our usual smelting furnaces, is at once separated into metal and oxygen. To melt silver requires a temperature of 1,000deg. according to the Centigrade thermometer, which is equivalent to 1,806deg. Fahrenheit. To melt gold a temperature is required of 1,250deg. Centigrade, or 2,256deg. Fahrenheit; for iron, 1,500deg. Centigrade, or 2,709deg. Fahrenheit.

470. Are tombs in any country used as places of residence?

Many of the tombs of the ancient Egyptians in Upper Egypt are so used. A recent traveller in that country records this custom, and relates how he resided for several weeks in the tomb of Uan, Sheik Said, the Royal Chancellor of Pepi. The Copts, or members of the ancient native Christian Church of Egypt, of both sexes, visit three times a year the tombs of their relatives, for the purpose of feasting, such tombs being made like houses. They pass the night in them, the women in the upper and the men in the lower rooms; and in the morning they kill a sheep, and after themselves partaking of it give the remainder to the poor. The Persians, during the spring and summer, visit the white marble tomb of Mohammed Shemseddin Hafiz, who was born and buried at Shiraz, dying about 1389. They esteem him more than any of their poets, and venerate him almost to adoration; a most elegant copy of his works being kept upon his tomb for the inspection of all who go there. The Persians, during their visits to this spot, spend the time in smoking, playing at chess and other games, as well as in reading his works. They also occasionally visit the tomb of another of their most famous poets, the Sheik Moslih Eddin Saadi, born at Shiraz in 1175, and buried near it after a life of 116 years. On his tomb is kept, for the inspection of all who visit it, a manuscript copy of his works, most elegantly transcribed; and on the top and sides of these tombs are engraved sentences from the works of the poets to whom they respectively belong.

471. Of which famous mathematical work was only one copy ever printed?

Charles Babbage, the eminent Cambridge mathematician, prepared a number of logarithmic tables, which were printed in twenty-one volumes, octavo, London, in 1831, with different coloured inks on variously coloured papers. The object of this work was to ascertain, by experiment, what tints of paper and colours of ink were least fatiguing to the eye. One hundred and fifty-one variously coloured papers were chosen, and logarithmic tables were printed upon them in ink of the following colours: light blue, dark blue, light green, dark green, olive, yellow, light red, dark red, purple, and black. The Latin treatise of Nicholas Copernicus, "On the Revolutions of the Celestial Orbs," maintaining that the sun is the centre of our planetary system, round which our earth revolves, remained in manuscript for thirteen years, because he correctly anticipated that bigotry and papal authority would denounce this theory as heresy. But a few hours before the death of this great mathematician and astronomer, in 1543, at the age of seventy, a printed copy was presented to him by his friends, the first and, doubtless then, the only one in existence.

472. What is the length of the longest reel of thread ever made without a break?

A hank or cut of cotton always consists of 840yds. Messrs. Thomas Houldsworth and Co., of Manchester, produced by their machinery cotton yarn or cotton thread so fine that out of one pound weight of cotton were spun 10,000 hanks, or a thread of 4,770 miles in length. Of course, the thread was too fine to be of any practical value. It demonstrated only the perfection of the machinery. No material admits of such fine spinning as does cotton. Messrs. Houldsworth spun out of one pound of Sea Island cotton a thread 1,000 miles in length that was quite strong enough for use. With linen yarn a hank or cut consists of 300yds.

473. Has air ever been frozen solid?

This has been accomplished by Professor Dewar, who has succeeded in freezing air into a clear, transparent solid. The precise nature of this solid is at present doubtful, and can only be settled by further research. It may be a jelly of solid nitrogen containing liquid oxygen, much as calves'-foot jelly contains water diffused in solid gelatine; or it may be a true ice of liquid air, in which both oxygen and nitrogen exist in the solid form. The doubt arises from the fact that Professor

Dewar has not been able by his utmost efforts to solidify pure oxygen, which, unlike other gases, resists the cold produced by its own evaporation under the air-pump. Nitrogen, on the other hand, can be frozen with comparative ease. The result of frozen air, whatever may be its precise nature, has been attained by the use of the most powerful appliances at command—a double set of vacuum screens combined with two powerful air-pumps.

474. What ancient piece of furniture contains the largest number of secret drawers?

This, which is probably one of the most unique pieces of furniture the world has ever seen, is the famous enamelled cabinet of Louis XIV., which was, during his reign, at the Louvre, but was removed to Versailles when the latter palace was completed. The Directory had it transferred to the Tuileries, and when Napoleon became Emperor, he made it his favourite secretaire. It is nearly 20ft. in length, and the same in height, contains 687 drawers, all richly enamelled, of which 130 are secret. Shortly after Leipsic, Napoleon gave it to his divorced Empress, Josephine, who had always admired it, and it remained with her at Malmaison until her death, and then it was sold by her executors in 1827 for a thousand guineas to an English dealer. It is now in the possession of a maiden lady, to whom it was left by her father's will.

475. Which books contain the most elaborate indexes?

The greatest example of zeal in this line on record, the first index-maker in the world, is the House of Commons. In 1778 there were paid for compiling indexes to the journals of the House of Commons the following sums: To Mr. Edward Moore, £6,400, as a final compensation for thirteen years' labour; Rev. Mr. Forster, £3,000 for nine years' ditto; Rev. Dr. Roger Flaxman, £3,000 for nine years' ditto; and to Mr. Cunningham, £500 in part for ditto; making a total of £12,900. Mrs. Cowden Clarke's "Concordance to Shakespeare" contains about 310,000 distinct references, and cost the authoress sixteen years of assiduous labour to compile. The most colossal indexing work ever undertaken is that in connection with the Library of the British Museum. At the end of 1887, 169 printed volumes of catalogue (all index) had taken the place of 633 of the 2,000 volumes in manuscript, and it is calculated that the beginning of the twentieth century will see the whole of the catalogue of this immense and ever-growing library represented by some 600 printed volumes. Another work of an ever-increasing number of volumes is "Palmer's Index to the 'Times,'" by Samuel Palmer, of Shepperton.

Amongst living authors whose works contain adequate indexes may be mentioned Herbert Spencer and St. George Mivart, F.R.S. Some items in their works are detailed under from fifteen to twenty different heads. The index to the "Chinese Encyclopædia of Literature and Science," complete in 5,040 volumes—the most stupendous literary undertaking ever projected—fills twenty substantial volumes.

476. Where are the police employed to capture sharks?

This is one of the multifarious duties performed by the police of Calcutta, namely, the capturing of sharks in the River Hooghly, the western branch of the Ganges. The authorities have, during the last twenty years, been paying rewards for the destruction of these marine man-eaters, and recently the Bengal Government has laid down a scale of payments in respect of this duty. The amount varies with the size and consequent difficulty of catching the fish. Thus, baby sharks between 2ft. and 3ft. in length only fetch 1s. in English currency, if over 3ft. they fetch double; while those who tackle sharks between 4ft. and 5ft. long receive 4s. For sharks up to 6ft. the payment is 6s., and those fortunate enough to capture bigger ones still are rewarded with 10s. for each one.

477. How many elementary schools are there in this country?

According to the returns for 1892, the number of such schools in the kingdom is 30,911, with an average attendance of 4,777,465 scholars. The figures for the different divisions of the United Kingdom are:—

	Number of schools.	Average number of scholars in daily attendance.
England and Wales	19,508	3,749,956
Scotland	3,105	538,365
Ireland	8,298	489,144

The expenditure by the nation on public education in 1892 was £7,492,350, made up as follows:—

England and Wales	£5,946,213
Scotland	686,336
Ireland	859,801

478. Who has been knighted twice during the present reign?

Lord Herschell, the present Lord Chancellor. At Windsor Castle recently, the Queen had arranged to invest Lord Herschell with the Grand Cross of the Bath in the drawing-room after dinner. On these occasions the Queen is always

very rapid in her movements, and Lord Herschell, having sunk on his knee to be invested, received the honour of knighthood before anyone could interfere. The Queen had overlooked the fact of Lord Herschell having already been knighted in 1880, on his appointment as Solicitor-General. The only man who ever lost his order of knighthood and received it again was the famous Admiral Thomas Cochrane, 10th Earl of Dundonald, who, in 1814, was tried for causing a rise in the Funds on the Stock Exchange by a false rumour of the fall of Napoleon, and then selling out to a large amount. He was deprived of the Order of the Bath, as well as his rank in the Navy and his seat in the Commons. But the charge, never generally believed, was finally entirely disproved and rejected, and the Queen, in 1847, restored him to higher honours as a Knight Grand Cross of the Bath.

479. Where does the marriage myrtle of the English Royal Family grow?

In the Queen's private gardens at Osborne. Near to the miniature fortress, erected in 1860 for the Dukes of Edinburgh and Connaught in their young days, grows this tree, which has one of the most interesting of histories. It is a myrtle some 5ft. high and growing luxuriantly, and, as the inscription tells us, was grown from a sprig of myrtle taken by the Queen from the wedding bouquet of the Princess Royal on the day of her marriage with the late Emperor of Germany. The inscription under the tree states: "Myrtle grown from a sprig of the Princess Royal's Marriage Nosegay, January 25th, 1858. Planted by Queen Victoria, February 17th, 1878, in honour of the marriage of her grand-daughter, Princess Charlotte of Prussia." The latter was the eldest daughter of the Empress Frederick. Sprays from this tree have since done duty in the bouquets of other Royal brides, and to judge by its condition, the tree will provide bouquets for long years to come.

480. Has a man ever been arrested under water?

In June, 1893, a deserter from the Army was arrested in this way near Liverpool. The deputy head constable having received information that Michael Traynor was wanted as a deserter and for stealing £8 from the military chest at Woolwich, an attempt to arrest him at a house in Roscoe Street, to which he had been traced, failed, and Traynor, jumping through a window, escaped. The deserter was next traced to Salford, where he was engaged in putting cargo on board a vessel about to sail. Traynor, seeing the officers approaching, rushed off and was hotly pursued. After running nearly a mile, he

jumped into the canal and swam to a log that was floating in the water, and one of the policemen, an expert swimmer, jumped in after him. Traynor dived from the log, and for a time was lost to sight. The officer, however, dived after him, and a struggle between the two took place under water. The policeman obtained the mastery, and with some difficulty succeeded in dragging his prisoner to the canal bank. Detective and culprit, both dripping wet, proceeded to the police-station, whence Traynor was taken on to Liverpool and locked up in the main bridewell.

481. In which European country were bankrupts obliged to wear green caps?

This was the custom in France during the 16th and 17th centuries. In Scotland, previous to its union with England, debtors were forced to wear parti-coloured garments, generally grey and yellow. A debtor in Siam can be seized by his creditor, put in chains and kept as his slave for the term of his natural life; if he escapes, his wife, children, father, or other relatives are liable to be seized. Bankruptcies never take place in China or Japan, as they entail execution at once. No bank failure or bankruptcy has occurred in China for the past 900 years, when a bank failure brought forth an edict—still in force—that on all future occasions the heads of the president, cashier, and directors should form part of the assets. According to old English statutes a bankrupt was considered a criminal or offender, and in 1731 an Act was passed by which a bankrupt who secreted his property or books was punished with death, and John Perrot was, under this law, hanged in 1761.

482. What is the most curious substitute for water in use in steam boilers?

Beet-juice. The use of this very peculiar substitute for water in steam boilers has attracted considerable attention in Belgium. The juice is heated to 248deg. Fahrenheit, at which temperature there is no danger of sugar inversion. Steam thus obtained is used in the regular way about the factory. The thickened juice is subsequently reduced to a syrup. A very volatile hydro-carbon is used in place of water in the steam boilers of Dr. Langley's flying machine. Some years ago experiments were conducted at Aix-la-Chapelle with what is known as the Honigmann fireless locomotive engine. The invention is based on the principle that solutions of caustic soda or potash in water, which have high boiling points, liberate heat while absorbing steam. In this fireless

engine, the heat so liberated is utilized for the production of fresh steam. If a steam boiler is surrounded by a vessel containing a solution of hydrate of soda, and if the steam, after having done its work in propelling the engine, is conducted with reduced pressure and a reduced temperature into the solution, the latter, absorbing the steam, produces fresh steam in the boiler. The boiling down of the soda lye required is done in fixed boilers at the stations from which the engines start, and where they are filled, a supply lasting for five hours. These engines eject neither smoke nor steam, and they work noiselessly.

483. Which lake is remarkable for the blue transparency of its waters?

The Lake of Geneva, or Lake Leman, a celebrated lake of Switzerland, extending in the form of a crescent between that country and Savoy, and occupying part of the great valley which separates the Alps from the Jura ridge. It is one of the largest and most beautiful lakes on the northern side of the Alps, and extends from east to west in crescent shape for a length of fifty-three miles, with a mean breadth of six miles. It has a superficial area of 223 square miles, and a level of 1,230ft. above the sea. At certain periods of the year the lake presents a curious phenomenon: the whole mass of water oscillates from side to side, causing, especially at Geneva, a rise and fall of from 2ft. to 5ft. in the course of about eight to ten minutes. The waters of the lake, as they leave it at Geneva, are as clear as glass and of a deep blue.

484. What is the greatest weight of a baby at birth on record?

Twenty-three and three-quarter pounds is the weight of the largest infant at birth of which there is any authentic record. This remarkable prodigy was born in Ohio, January 12th, 1879, and was the son of Mr. and Mrs. M. V. Bates—the father being the "Kentucky Giant," and the mother the "Nova Scotia Giantess." The new-born boy was 32in. in height, and had a foot 6in. in length. The head of the child was 19in. in circumference, larger than that of the average five-year-old. Prior to the birth of the Bates wonder, the London Hospital Museum boasted owning the largest child ever born. This claimant was 24in. in height, and had a head that measured 13½in. On October 2nd, 1881, the wife of a prominent Washington citizen gave birth to a child of the following extraordinary proportions: Weight 22½lb., length 24½in., circumference of head 13¾in. At a baby show held at Battersea

a few years ago, a large twelve-month-old boy was exhibited, Ernest Ephraim Middleton; he was 3ft. high and weighed 58lb.; chest, 30in.: arms, 11½in. at the elbow; legs, 20in. The daughter of Joseph Davis, of Wayne County, West Virginia, weighed, when six years of age, 230lb., which is believed to be the heaviest weight of any child at that age ever recorded. The smallest child at birth weighed only 8oz.; at ten days it increased to 1½lb. His name is John Mansfield Mayville, and he was born at Massachusetts, United States. In Great Britain the average weight of the newly-born male child is 7⅓lb.; of the female, 6⅔lb.

485. How many vessels are sunk in the Thames every year?

Between forty and fifty. In a paper read before the Institute of Civil Engineers, Mr. More mentioned that during the past eleven years seventy-four steamers of 55,758 tons register, fifty-four sailing vessels of 9,128 tons, and 301 barges of 11,956 tons, being a total of 76,842 tons register of shipping, had been raised by the Conservancy lighters. In 1889, out of the forty-five sunken vessels raised, ten were steam vessels measuring 5,064 tons, seven were sailing vessels, and twenty-eight were barges. In the following year, out of the forty-six sunken vessels raised, nine were steam vessels, with a total of 7,732 tons, three were sailing vessels, and thirty-four were barges. At a recent meeting of the Thames Conservators, it was stated that the cost of the wreck service in 1892 was £2,228, and the harbour service £7,382.

486. How was life insurance first suggested?

Marine insurances are recorded from A.D. 43, when the Emperor Claudius insured one of his ships. Life insurances, however, were not effected till the French philosopher, Pascal, had worked out his "Theory of Probabilities," and laid down the "laws of averages," which now govern insurance transactions all over the world. Pascal's idea was suggested by a game of cards. A Flemish nobleman attempted to divide equitably the money staked upon an interrupted game of chance. In determining how this could be done he made his important discovery. The first life assurance policy was issued by the Office of Insurance "within the Royal Exchange," in London, in 1583; and though the Mercers' Company of London effected life assurance in 1698, no company existed solely for the purpose until 1699, when the Society of Assurance for Widows and Orphans was started by Mr. Stansfield, at St. Austin's Gate, near the east end of St.

Paul's, London. The first life office with a charter of incorporation was the "Amicable," founded in 1706. The first fire insurance company was the "Hand-to-Hand," in 1696. Great Britain has taken greater advantage of insurance benefits than any other country, the ratio of life insurance being £12 per head of population, as compared with America at £6; Canada, £4; Germany, £2 9s.; France, £2 4s.; Austria, £1 2s. In England 2,659 persons out of each 100,000 are insured. The companies own £164,000,000, and the average amount of policies is £460. Insured property to the value of £30,000 is burnt daily in the United Kingdom. There are eighty-four ordinary and eight industrial companies in existence. The total amount of life insurance and annuity funds in Great Britain reaches nearly £1,000,000,000 sterling. It is remarkable that out of every hundred lives insured only five are women. The total of the world's life insurance policies amounts to £1,800,000,000 sterling.

487. Where is the largest glacier?

In Alaska, where the Muir Glacier is situated. Professor John Muir, after whom the glacier is named, was the first to describe it. According to a recent visitor, Mr. S. P. Baldwin, it is as large as all the Alpine glaciers in one, being 1,200 square miles in area. Where it discharges into the sea, it presents a wall of blue ice exceeding 500ft. in thickness. This river of ice, with its numerous branches, is 150 miles in length, and varying from one to a dozen miles in width. It is continuously discharging icebergs, small and large, some containing hundreds of tons of ice, the fall of which into the sea casts up spray for hundreds of feet into the air. The Muir Glacier is estimated to discharge 77 billion cubic feet of ice in icebergs, and 175 billion cubic feet of water by melting every year. The Justedals Brae, in Norway, is the largest glacier in Europe. It covers an area of 350 square miles. The largest Alpine glacier is the "Mer de Glace" around the Finster-Aarhorn. This glacier sends out thirteen branches, and covers 125 square miles. The longest glacier pass in the world is the Hispar Pass in the Himalayas; it is ninety miles in length.

488. Where is the largest ornamental pond in this country?

Frensham Great Pond, in the district of Farnham, in Surrey, covers over 100 acres, and measures more than three miles in circumference. It is famous for pike and perch fishing, and possesses a wild, lovely picturesqueness in its surroundings. Virginia Water, which is called a lake, is the largest artificial

ornamental sheet of water in this country. It is upwards of a mile and a half long, of varying width, and is situated five and a half miles from Windsor Castle, at the extreme south of Windsor Great Park in Berks, and partly in the parish of Egham in Surrey. It was formed at great expense for the Duke of Cumberland, of Fontenoy and Culloden, the youngest son of George II., the work being superintended by Paul Sandby, a landscape painter, and one of the English water-colourists.

489. What is the longest period of absolute drought in this country in recent times?

Mr. G. J. Symons, of the Meteorological Society, defines absolute drought as a period of more than 14 consecutive days without any measurable rain; and partial drought as a period of more than 28 consecutive days with a total rainfall of less than 0·01 inch per day. Mr. Symons says that the longest absolute drought in this country during the last 36 years, since his record commenced in 1858, took place in March and April, 1893, and lasted 29 days. In the 36 years there have been eleven instances of three weeks' absolute drought, but until 1893 there had been but one instance (August 9 to September 5, 1880) of four weeks, or 28 days; and the drought of 1893 exceeded that by one day, the absolute drought having lasted 29 days. It extended to nearly every part of the world, including the United States and Australia. Absolute droughts of 49 days in 1802 and 42 days in 1835 occurred at Sunbury, as recorded in the register kept at that place by the Rev. J. Cowe.

490. Which living peer has been in the House of Lords for the longest period?

Lord Crewe, who is 81 years of age, and succeeded to the title in 1835, has had a seat in the House of Lords for 58 years. The noble lord is an English baron; family name, Hungerford Crewe. Several other English peers have been in the House over half a century, among whom are Lord Lovelace, an English earl, who was born in 1805, created an earl in 1838, and has had a seat for 55 years. The Earl of Mansfield is 87 years of age, and has had a seat in the Upper House for 53 years. The oldest peer of the realm is Lord Ebury, aged 92 years, created a baron in 1857.

491. Where is the most beautiful staircase in the world?

In the Palace of the Vatican at Rome. The Scala Regia (Royal Staircase), with its two flights of stairs, the lower decorated with Ionic columns and the upper with pilasters,

leads to the Sala Regia, built in the reign of Paul III., and used as a hall of audience for Ambassadors. The Palace of the Vatican has eight grand staircases and 200 smaller ones, with 11,000 chambers of various sizes. In the palatial residence of Baron Hirsch, at Paris, at the corner of the Rue de l'Elysées and the Avenue Gabriel, is a magnificent staircase. That in Mrs. James Mackay's house in Carlton House Terrace, London, cost £20,000. It is made of the purest marbles from all the quarries of the world, carved by the first sculptors of the day. Magnificent statues ornament every landing, and in panels along the banisters are most chastely designed specimens of metal work after the Old Masters. The standards for gasaliers and electric lights are of pure silver, in the richest designs; in fact, all that money and the efforts of men of fine taste could do has been done to make it one of the finest staircases in the world.

492. Who owns the most valuable draught-board?

Prince Bismarck, who is an ardent lover of the game of draughts, possesses the most valuable board in existence. Its squares are made of gold and silver, to represent the dark and light squares respectively. The men are made of the same metals, with the addition of a diamond in the centre of each silver and a ruby in the centre of each gold draughtsman. William Gardiner, a famous player, offered blindfolded to play eight of the best players amongst the members of his club. Robert Stewart, of Kelty, Fife, nineteen years of age, won the local club medal three years in succession, and during a visit of the "herd laddie" (the acknowledged champion of the world for many years), James Wyllie, played six games with him, which resulted as follows: Wyllie, one; Stewart, one; and drawn four. Mr. F. C. Barker, of the United States, is now the champion player of the world. Henry Christie, of Sunderland, began to play draughts at the age of seven. He now holds the position of the champion player for England.

493. What English barrister tried the greatest number of avocations before being called to the Bar?

The late Mr. Montagu Stephen Williams, Q.C., Stipendiary Magistrate of Marylebone, London, on leaving Ipswich Grammar School, joined the South Lincolnshire Militia, and on the Crimean War breaking out obtained a commission in the 96th Regiment of Foot, and afterwards in the 41st Welsh Regiment of Foot. Growing weary of the Army he became an actor, playing minor parts in all the great towns of the kingdom, and married Miss Keeley, the actress. He then

became a journalist, reading at the same time for the Bar, to which he was in due time called; obtaining immediate success in his new vocation, and earned 600 guineas in his first year. Mr. Frank Lockwood, Q.C., M.P., after graduating B.A. at Caius College, Cambridge, became a professional actor, as he had previously been an amateur one, before reading for and being called to the Bar. Mr. Samuel Pope, Q.C., before taking to the profession of a barrister, was an actor, like the two former: and, earlier still, he was in the drysaltery business. He is, moreover, a breeder of sheep, pigs, and Welsh black cattle. Mr. Robert Wallace, M.P. for East Edinburgh, has had a varied career. For many years he was minister of Old Greyfriars Church, Edinburgh, and Professor of Church History in Edinburgh University. He was the immediate successor, in the editorial chair, of the famous "Russel of the 'Scotsman.'" He is a D.D. of Glasgow University, and was called to the Bar, at the Middle Temple, in 1883, when he was nearly fifty.

494. What amateur possesses the best appointed laboratory in the United Kingdom?

The Marquis of Salisbury, who is an enthusiastic scientific amateur in electrical matters, possesses a better appointed laboratory than any other amateur, and as good if not a better one than most professional electricians. Lord Kelvin, then Sir William Thomson, at the 1889 dinner of the Electrical Engineers, referring to Lord Salisbury, said "they all felt the honour which his lordship, who was one of themselves as a scientific electrician, had done them in being present at that the first annual dinner of the Institute." At Hatfield electricity is made serviceable in many ways, including the lighting of the old historic residence, which was visited by the Queen in 1887.

495. What is the highest barometer reading on record?

Dr. Hann recorded that on the 14th of January, 1893, the barometer at Irkutsk, in Siberia, after the reading had received all the necessary reductions, attained the unprecedented height of 31·8in. So far as is known, this is the highest reading that has ever been recorded on the globe, the nearest approach to it being 31·7in., on the 12th of January, 1893, at Irkutsk, and the same height at Semipalatinsk, on the 16th of December, 1877. On the 14th of January, 1893, the thermometer fell to minus 51·3deg., or about 40deg. below the mean for that month. In the north of Sweden the temperature was minus 76deg., or 38deg. below the freezing-point of mercury.

The highest barometer reading in Great Britain occurred in Scotland on the 9th of January, 1820, near Leith, when the reading was 31·065. The highest reading ever recorded in England was at St. Leonards, Hastings, on the 18th of January, 1882, when it was 30·990.

496. What is the greatest number of wickets taken in any match by a bowler with successive balls?

In a match played at the Murthly Asylum, near Perth, on 28th June, 1893, against the Dundee Royal Asylum, one of the players in the Murthly team took eight wickets with ten balls for no runs. In one over, with his last ball he took a wicket. Every ball (five) in the next over dismissed a batsman, while with the third and fourth balls of his next over he took two wickets, thus taking eight wickets in ten balls, six successively. Seven out of the eight were clean bowled, and one caught. Playing for Knowle Park *v.* Dartmouth Park Second Eleven, on June 14th, 1890, W. Park took seven wickets with seven consecutive balls. On two occasions six wickets have been taken by a bowler with successive balls in Australia. A. Elliott, in an Adelphi Juniors' (South Australia) match, and Fotheringham, for Brooks and Co. *v.* Collier and Co. (Victoria), performed this feat. H. Duke took six wickets with six consecutive balls in a match between Odsey and Steeple Morden, May 30th, 1892. J. Isted, in Teeting *v.* Great Waltham, also performed this feat.

497. Which celebrated astronomer wore an artificial nose?

Tycho Brahé, the famous Danish astronomer, who was born at Knudsthorp, Denmark, in 1546, and was descended from a noble Swedish family. He studied philosophy and rhetoric, with a view to making the law his profession. The solar eclipse, however, which happened whilst he was at the University of Copenhagen, in 1560, directed his attention to astronomy, to which he applied himself with the greatest assiduity, while professedly studying the law at Leipsic. In 1565 he returned home, and in a quarrel with a Danish nobleman lost his nose, which he supplied with an artificial one made of gold, so naturally formed and painted that the defect could hardly be perceived. About this time he ardently entered upon the study of chemistry, in hopes of finding the philosopher's stone. After this he travelled for some years, and on his return to Denmark resided with his uncle, who furnished him with the means of making celestial observations, and there it was that, in 1572, he discovered a new star

in the constellation Cassiopeia. The King, Frederick II., was so delighted with the lectures and pursuits of Brahé, that he gave him the Isle of Hveen, where in 1576, he laid the foundation of an observatory, to which he gave the name of Uraniburg, or the City of the Heavens. Besides this he had an observatory sunk in the ground, to which he gave the name of Stelberg, or the City of the Stars. The King added to the donation a pension and some lucrative places. In 1600 he was joined by the celebrated Kepler, and these illustrious men pursued their studies together until the death of Tycho Brahé, in 1601.

498. Have ladies' dresses ever been made of glass?

Yes; the latest novelty in dress material is a cloth made from spun glass, suitable for making up into dresses for ladies. This material is said to be as bright and as supple as silk, with a peculiar sheen reminding one of the sparkle of diamond-dust. In Russia there has, for a long time, existed a tissue manufactured from the fibre of a peculiar filamentous stone from the Siberian mines, which by some secret process is shredded and spun into a fabric which, although soft to the touch and pliable in the extreme, is of so durable a nature that it never wears out. This is probably what has given an enterprising manufacturer the idea of producing spun-glass dress lengths. The Muscovite stuff is thrown into the fire when dirty, by which it is made absolutely clean and ready for use; but the spun-glass silk is simply brushed with a hard brush and soap and water, and is none the worse for being either stained or soiled. This material is to be had in white, green, lilac, pink, and yellow, and bids fair to become very fashionable for evening dresses. It is an Austrian who is the inventor of this novel fabric, which is rather costly. Table-cloths, napkins, even window curtains are manufactured thereof; and a Court train, in a very delicate hue of pale lavender, shot with pink, recalls the dresses described in a fairy tale.

499. Where is there a statue with a figure standing on a crocodile?

In Venice, where the figure of the statue of St. Theodore stands on a crocodile on the top of a granite column. The figure stands 10ft. in height, and the crocodile measures 14ft. in length. Both are made of Greek marble, bound together with iron coated with bronze. On close examination it was found that half the marble was good and half bad, that half the workmanship was good and half bad; and

then it was further alleged that it was not St. Theodore at all, nor even one homogeneous person. The figure has the head and bust of a Roman emperor, with the lower part of the body and limbs of some inferior personage. The legs of the figure, and the part of the body of the crocodile on which it stands, are one piece of marble. The engineer in charge of the statue and column believes that the upper part of the figure is that of the Emperor Constantine, with his crown of laurel and breast-plate with the Christian cross on it, and that the lower part is that of an inferior Greek statue. The shield is on the right arm, whilst the left hand holds the spear. It is, however, certain that the statue was set up to represent St. Theodore and his crocodile. As in the case of the Great Lion at Venice, casts of St. Theodore and his crocodile have been taken to be sent to Rome, Paris, and London.

500. What animal possesses three jaws?

The leech, which has three semi-circular jaws, each fitted with from eighty to ninety teeth. These teeth are furnished with ragged edges, like those of a saw. As soon as it feels assured of a sufficient connection with its basis of operation, it commences to move the operating teeth backwards and forwards with great rapidity, until it divides the skin of its victim or patient, leaving the characteristic mark of its triradiate bite. Gluttonous though the leech unquestionably is, and appreciative of human blood, it is not a little fastidious as to the conditions on which it will take the trouble even to settle on a skin. Owing to its great sensibility of perception, the leech will not attach itself to the person of anyone who is under the influence of intoxicating drink or certain narcotics; while on the skins of others it will settle all the more readily if moistened with milk. The medicinal leech occurs in Great Britain, but is much commoner on the Continent. A hatchery near Hildesheim raises three and a half million annually.

501. Which English railway company first ran dining cars?

The Great Eastern Railway Company can claim the honour of first running dining cars in this country. In 1862 dining cars were attached to the corridor trains from Doncaster to Harwich. They were for the convenience of first and second class passengers only. The Great Northern Railway Company adopted the dining car system in 1879, when a first-class dining car was put on the express service between London and Leeds. This was shortly followed by a similar

addition to the express service between London and Manchester. In 1892 the directors of the three East Coast companies (Great Northern, North-Eastern, and North British) resolved on a further development of this system, so as to extend to third-class passengers the comforts and conveniences which the first-class passengers had enjoyed. The new dining car trains, on the King's Cross and Edinburgh service, leave King's Cross and Edinburgh at the same time, namely, 2.30 p.m. Dinner is served in the down train on leaving York at 6.30 p.m., and in the up train on leaving York at 7.15 p.m. In the third-class dining car the dinner served is of four courses—soup, fish, joint, and sweets—for 2s. 6d.; and snacks and tea and coffee can be obtained at pleasure at moderate prices. The dinner in a first-class dining car is of six courses, at a cost of 3s. 6d. The kitchen car occupies the central position, between the first-class dining car on the one side and the third-class dining car on the other. The system has been adopted on the other two routes between London and Scotland, by the Midland and London and North-Western companies, both of which now run third-class as well as first-class dining cars.

502. Which cathedral in this country has a secret dungeon?

Chichester Cathedral has a dungeon of this description, having a heavy and massive door. It is also provided with a secret entrance, admission to which is obtained by a sliding panel in a room at one time used as a library. The cathedral, founded in 1078, was renovated after a fire in 1114, and restored after another fire in 1187. It consists of a nave of eight bays and four aisles, a transept with chambers instead of aisles, a central steeple, and a south-west tower. Carlisle Cathedral, during the period of the Jacobite rebellion, was used as a huge dungeon, and many rebels were imprisoned there in 1745. The chief engineer in the Royal forces even demanded the bells as his perquisites; which claim the Dean and Chapter successfully resisted. Having been used for this purpose, the cathedral was left in such an intolerable state of filth, that not till after six weeks' cleansing and burning of much sulphur and tar could it be used for service.

503. Does any Volunteer corps in this country consist wholly of total abstainers?

Only one—the 4th Volunteer Battalion of the Royal Scots (formerly 2nd Edinburgh). This corps was founded by the late John Hope, of Edinburgh, and the company is popularly

known as John Hope's abstainers. Every member is a teetotaler. Temperance has of late years made large additions to its ranks in all branches of the military forces of this country. In India, where, owing to the climate, abstinence is so necessary, the principles and practice of temperance have, thanks to General Roberts, taken deep root among our soldiers. There are no fewer than 17,500 total abstainers in the ranks, or a quarter of the entire British forces in our Eastern dependency. With one or two exceptions there is not a corps in India which does not contain a branch of the Army Temperance Association. In a single battalion of infantry, the famous Royal Welsh Fusiliers, the membership is 535. Branches have lately been formed in two Highland corps—the Argyll and Sutherland Highlanders and in the Gordon Highlanders; in the 19th Hussars, and in all the artillery batteries which have recently arrived in India.

504. Were shops ever set up in Westminster Hall?

In olden times, when the courts were held in the Hall, there were several shops there also, as is shown by an old engraving, taken from a drawing by Gravelot, who died in 1773. The following description of those places of business accompanied the engraving: "The first shop on the left is occupied by a bookseller; the next by a mathematical instrument maker; then there is another bookseller; beyond him a dealer in articles of female consumption; beyond her, a bookseller again; and last on that side a second female shopkeeper. Opposite to her, on the right side of the Hall, stands a clock; the first shop next from the clock is a bookseller's; then comes a female map and print-seller; and, lastly, the girl who receives the barrister's hat into her care, and whose line appears to sustain the 'turnovers' worn by the beaus of those days with 'ruffles,' which, according to Ned Ward, the sempstresses of Westminster Hall nicely 'pleated' to the satisfaction of the young students learned in the law." In those same old days evidence to suit the wishes of the purchaser was obtainable by either side for cash, and witnesses ready to swear anything they were told openly walked Westminster Hall, with a straw in the shoe, to signify they were open to employment as witnesses.

505. Can the human body be used as part of a telephone line through which messages can be transmitted?

This has been proved to be feasible by an experiment made in connection with two telephone central stations. When the subscribers wish to speak with one another, the switch-holes of

their respective lines are connected at the switch-board by means of a conducting connecting cord. It was found that if two connection cords were taken, one peg inserted into each switch-hole, and the other free pegs in the (previously moistened) hands, conversation could be carried on as clearly as on direct connection by means of a conduction cord, the telephone currents in that case acting across the human body. Conversation could also be easily carried on even when a chain of several persons was formed, holding each other's hands, the first and last in the chain having hold of the free pegs of the connection cords. This experiment proved to be a most amusing one, because it was shown to be possible by means of the persons placed in circuit to hear the talk of conversing subscribers.

506. In which city are there no wheeled vehicles?

In Canton, one of the principal cities in the Chinese Empire, the streets of which are too narrow to admit of wheeled vehicles, being only from 6ft. to 9ft. in width. The streets of the city, which exceed 600 in number, are in general less than 8ft. wide and very crooked. The banks on both sides of the river are lined with rows of junks, sampans, slipper and flower boats, in which some 300,000 of the population live, having no home on shore, each boat being occupied by one family. Sedan chairs with bearers are the usual mode of locomotion through the streets. Tangier, a seaport town of Morocco, is also entirely free from wheeled vehicles. The streets are too narrow for wheeled traffic, all transportation being effected on the backs of donkeys, horses, or camels.

507. Who owns the most curious tobacco-box in this country?

The Past Overseers' Society of the parishes of St. Margaret and St. John the Evangelist, in the City of Westminster. This tobacco-box was originally a common horn tobacco-box, purchased by Mr. Henry Monck, at the Horn Fair, for fourpence, and presented by him to the society for the general use of its members. In 1720 the overseers ornamented the lid with a silver rim, bearing the following inscription: "Given by Henry Monck, one of the overseers of St. Margaret's, Westminster, 1713," and then committed it to the custody of the senior overseer for the time being, through each of which annual officers it has descended to the present day, and from most of whom it has received successive silver ornaments and additions. The next addition, after 1720, was a silver side-casing and bottom in 1726. In 1740 a broad, handsome

embossed border of ornaments was placed upon the lid within the rim; and subsequently the bottom was covered with an "ornamental emblem of Charity," engraved very much in the style of Hogarth, and probably by that artist's own hand; for in 1746, Hogarth, then in the zenith of his reputation, designed and executed, on the inside of the lid, a portrait of the Duke of Cumberland, in manner of a bust, with allegorical figures at the sides of the pedestal, and an inscription commemorative of the victory of Culloden. The last addition to the lid was an interwoven scroll, dated 1765; the scroll incloses a plate in the centre, bearing the arms of the City of Westminster, and inscribed, "This box to be delivered to every succeeding Sett of Overseers on penalty of Five Guineas."

508. What is the weight of the heaviest ear-rings ever worn?

In a paper read recently before the Royal Geographical Society on the Highlands of Borneo, in the Indian Archipelago, Mr. Charles Hose gave an account of how the native mothers stick huge rings through their daughters' ears at the age of eight months only, eventually increasing them to the weight of two pounds each. By the time that a girl has come to maturity her ears, thus weighed down, reach almost to her elbows, and Mr. Hose has seen one woman put her head through one of these elongated ear-lobes. In the South of Italy long and heavy ear-rings are worn, though not approaching those of Borneo. The length of the ear-rings worn by Italian women indicates the part of Italy the wearers come from; the longer the ear-rings the farther south the women come from. In the extreme south most of the ear-rings hang close to the shoulders, while in the north they are quite short.

509. Have the Royal Arms of England passed through any changes since the Conquest?

Richard Cœur-de-Lion, after his return from the third Crusade, had the three lions passant guardant (or leopards) in pale, as they have ever since been depicted. In 1340, Edward III., in virtue of the supposed right of his mother, assumed the title of King of France, and quartered the arms of France (azure, semée of fleurs-de-lis or) with those of England. Richard II. bore the reputed arms of Edward the Confessor impaled with his quartered coat. In the latter part of the reign of Henry IV. the fleurs-de-lis were reduced to three in number. No further change took place in the Royal escutcheon until the time of James I., except that Mary, after her marriage with Philip II., impaled

the arms of Spain and England. James VI. of Scotland, on succeeding to the English throne as James I. quartered the arms borne by preceding Sovereigns with those of Scotland and Ireland, the first and fourth quarters being counter-quartered France and England; the second quarter being the lion rampant of Scotland; the third the harp of Ireland. No change then took place until the reign of Anne, except that William III. bore *en surtout* the coat of Nassau. In the reign of Anne the legislative union with Scotland brought about a further change: England impaled with Scotland was placed in the first and fourth quarters, France in the second, and Ireland in the third. The accession of George I. displaced England and Scotland from the fourth quarter to make way for the arms of Hanover. In 1801 George III. laid aside the titular assumption of King of France, and abandoned the fleurs-de-lis. The arms of England were now made to occupy the first and fourth quarters, Scotland the second, and Ireland the third, while the arms of Hanover were placed *en surtout*. These last were abandoned on the severance of Hanover on the accession of Queen Victoria, when the Royal escutcheon assumed its present arrangement.

510. Why is the smoke from the bowl of a pipe blue, while that from the mouth is grey?

Smoke consists of minute particles of solid or liquid matter suspended in the air, and its colour depends partly upon the chemical constitution of such particles, but also largely upon their size. Exact experiment has shown that as the size of minute particles suspended in air is gradually increased, they give rise to colours varying from sky-blue down through the whole range of the spectral scale. This is the cause of sunset and sunrise colours in the sky. Its effects can also be traced in the case of the two kinds of tobacco smoke, modified by the murky tints of the carbonaceous products. The smoke given off from the heated surface of the burning tobacco in the bowl of the pipe consists of matter, all of which has been highly heated and very fully oxydized and decomposed. It consists mainly of exceedingly small solid particles, exhibiting by virtue of their smallness a bluish colour. On the other hand, that smoke which has been drawn through the tobacco into the mouth of the smoker carries with it a relatively large quantity of water and hydrocarbon, which are condensed upon the solid particles above mentioned. The relatively large size of such particles explains the well-known greyish colour of the smoke which issues from the mouth of the smoker.

511. Who owns the largest collection of hymns?

John Rylands, of Manchester, who died in December, 1889, had the largest collection of hymns in the world. His object was to collect the hymnology of all nations, and in the course of many years he succeeded in collecting no fewer than 20,000 hymns. The Bishop of Exeter has a collection amounting to 9,000 hymns. The estimated number of British hymns is 25,000. Charles Wesley wrote 6,500; Mrs. Francis Crosby, a blind American writer, 3,000; James Edmeston, an architect, 2,000; Beddome, a Baptist, 830; Kelly, an Irish clergyman, 765; James Montgomery, a journalist, 400; Isaac Watts, 400; Charlotte Elliott, 150; Bishop Christopher Wordsworth, 120; Dr. Horatius Bonar, 120; Henry Francis Lyte, 110. According to Mr. John Murray's "Dictionary of Hymnology," recently published, the total number of Christian hymns in the 200 or more languages or dialects in which they have been written, or into which they have been translated, is not less than 400,000. Messrs. Moody and Sankey have realized upwards of £220,000 by the sale of their well-known hymns. "Hymns Ancient and Modern" have been printed in many different editions, and have had the greatest circulation of any book published in modern years, more than 25,000,000 copies having been already sold.

512. Has a Parliamentary Speaker ever been arrested?

Sir Matthew Davies, late Speaker of the Victorian Parliament, was recently arrested at Colombo. Ten years ago—when he was thirty-two—he was an ordinary Melbourne solicitor. But, foreseeing and largely promoting the coming "land boom," he speculated on an immense scale in suburban land around Melbourne, with the result that he rapidly blossomed into a millionaire, secured the Parliamentary representation of the most fashionable suburb, was selected as Speaker, mainly because he was willing to spend thousands in the performance of the social duties of the office, and was knighted. The land boom collapsed, and with it fell a score of banks and mushroom companies with which Sir Matthew Davies was more or less connected. Then came a protracted prosecution against Sir Matthew and his brother directors of the defunct Mercantile Bank of Australia for issuing fraudulent balance-sheets. It is in connection with this charge that his arrest took place. Sir Francis Bacon, Lord Verulam, who was Speaker of the House of Lords in 1621, was imprisoned in the Tower and fined £40,000 for receiving bribes. Sir John Trevor, Speaker of the House of Commons, was expelled from the Speakership and from

the House for having accepted a bribe of 1,000 guineas from the City of London for his support of a Bill in which the City was greatly interested.

513. Why can you throw a wet sponge higher into the air than a dry one?

A wet sponge can be thrown into the air higher than a dry one for just the same reason that a stone can be thrown into the air higher than a feather of the same circumference: because the specific gravity of the wet sponge and stone is greater than that of the dry sponge and feather, and they can therefore meet the air with more power or resistance. It is exactly for this same reason that the wet sponge returns to the earth more quickly than the dry one, and the stone than the feather. The specific gravity of water, or its weight in proportion to size, is as nearly as possible 834 times as great as that of air. A dry sponge is full of air, and a sponge full of water is about 834 times as heavy, and can strike the air with greater force than a dry one somewhat in this proportion. The dry sponge is, moreover, for the same reason more liable to be blown about and diverted from its upward course by the wind.

514. Where is the most wonderful underground temple in the world?

In the City of Carlee, about 600 miles from Calcutta, whose Hindu cave-temple is rightly considered one of the wonders of Asia. Before the entrance to the temple, and just to the left, stands a monster stone elephant, upon whose back is seated a colossal goddess, hewn from the same block. Like the goddess and the elephant, the temple itself, a building of immense proportions, has been cut out of the solid stone forming part of the mountain side. Like the temple walls and outside figures, every article of adorning sculpture on the walls or in the interior is hewn from the native rock. The nave is 124ft. long, 45ft. broad, and 46ft. from floor to ceiling. There are aisles on each side, separated from the nave by octagonal pillars. The capital of each pillar is crossed by two kneeling elephants, on whose backs are seated two figures representing the divinities to whom the temple is dedicated. Behind the altar are seven mammoth polished pillars, there being altogether thirty-eight columns and pillars in the temple, the grandest of which is the lion pillar, which has sixteen carved sides, and is surmounted by four carved figures of lions. The statuary is in massive relief, each figure standing on its original base, all cleft out of the

solid rock (hardest porphyry) while the temple was in course of construction.

515. Where is the finest example of a moated house in England?

Helmingham Hall, the seat of Lord Tollemache, in Suffolk, about eight miles from Ipswich. The existing drawbridge has been raised every night for the past three hundred years, and the present owner does not allow the custom to become obsolete. Another fine example of a moated house is Leeds Castle, about three miles south-east of Maidstone, in Kent, which, surrounded by its moat, forms almost a lake crossed by a single bridge. There is a fine moat at Wells, in Somersetshire, where the episcopal palace, an ancient castellated mansion, is surrounded with walls inclosing nearly seven acres of ground. This moat is supplied with water from St. Andrew's Well. On the north side is a venerable gateway tower, leading over a bridge into the outer court, on the east side of which is the palace containing several spacious and magnificent rooms and a chapel. Wells Cathedral, though one of the smallest, is yet, perhaps, one of the most beautiful of English cathedrals, its principal glory being its west front, with its matchless sculptures, 600 figures, of which 151 are life-size.

516. Which British workhouse spends most money every year on intoxicating liquors?

West Ham. The four workhouses where the yearly expenditure exceeds four shillings per inmate per annum are:—

Union Workhouses.	Inmates, daily average.	Yearly expenditure on intoxicants. £	Average expenditure per inmate. s. d.
West Ham	1,287	495	7 8
Wolverhampton	954	335	7 0
Bristol	925	320	6 11
Plymouth	539	160	5 11

Those spending less than a shilling per inmate are:—

Union Workhouses.	Inmates, daily average.	Yearly expenditure on intoxicants. £	Average expenditure per inmate. s. d.
Aston	1,025	9	0 2
Newcastle-on-Tyne	804	3	0 1
Leeds	1,009	1	0 0·25

517. What is the average "life" of a London house?

The "life" of a building depends upon the materials of which it is constructed, and largely upon the skill of the builder. The great majority of the domestic houses in London being of brick, faced with stucco or "compo.," may reasonably be expected to have a "life" of two centuries. Of course, more substantial stone buildings, of which there are many in

London, will endure much longer. The Tower is an example of longevity—dating back to the Conquest. London smoke has a deteriorating effect upon many kinds of building stones, causing decomposition, through the affinity which the magnesia in limestone, etc., has for the sulphurous acid contained in such vast quantities of smoke.

518. Has an English clergyman ever become a Mohammedan?

Such a case occurred in September, 1891, when an English clergyman, a graduate of St. John's College, Oxford, was admitted a Mohammedan at the mosque established by the followers of Mahomet at Liverpool. It appears that for some months previous the reverend gentleman had been in communication with the officials of the Moslem Institute in Liverpool, and had been making numerous inquiries on doctrinal points. About a month before his admission he attended several of the public services and lectures at the mosque, in Brougham Terrace, West Derby Road, Liverpool. On Sunday, September 20th, 1891, he was present both morning and evening. The public service on that day was conducted by Mr. G. Khalid Smith, the hon. secretary, and the lecture was given by Mr. W. H. Quilliam, the president of the society, the subject being the "Power of Thought." At the close of the public service the reverend gentleman had an interview with the leading officials, and declared his intention to renounce Christianity and embrace Islam. He repeated the "Kalma," or Moslem confession of faith, and signed the roll of membership. The first Mohammedan mosque in this country was opened in August, 1889, at Maybury, Woking, in the County of Surrey. At the mosque in Liverpool, service is held every Friday (the Moslem Sabbath), and on Sundays. Forty millions of the subjects of the Empress of India are followers of Mahomet.

519. Who is the oldest Lord Lieutenant in the United Kingdom?

William King-Noel, Earl of Lovelace, of Horsley Towers, Leatherhead, is the oldest Lord Lieutenant in the United Kingdom, both in point of age and length of service as head of his county. He was born on the 20th of February, 1805, and is, therefore, now in his eighty-ninth year, while he was appointed Lord Lieutenant and Custos Rotulorum of the County of Surrey on the 19th of August, 1840, and has, therefore, completed his fifty-third year of tenure of that office. The Earl of Leicester, K.G., born on the 26th of

December, 1822, comes next in point of length of service, having been appointed Lord Lieutenant of Norfolk in 1846. The oldest Lord Lieutenant in Ireland is Robert Dillon, third Baron Clonbrock, holding that office for the County of Galway, where he has a residence at the place from which he took his title, as also at 34, Duke Street, St. James's, London. He was born in 1807, and is, therefore, eighty-six years of age. Since 1838 he has been one of the elected representative peers of Ireland in the House of Lords.

520. Where do they fight duels with clubs?

This is a practice of American Indians among members of the same tribe. Their quarrels of a serious character are few in number, but now and again they will occur, and when a challenge to combat has been given, each is accompanied by his friends to the battle-ground. There they strip and confront one another, while between them lies a war club, a smooth, long piece of hard wood, seasoned by years of service and regarded with reverence, because of the blood-stains on it received during the wars. The seconds of the duellists toss up a piece of bark. The winner picks up the club, and his opponent, folding his arms, plants himself, bending his head. It is the club-bearer's privilege to whack his antagonist, just as hard as he can, on the back. One blow struck, and then the man who has endured it picks up the club, and his opponent is subjected to a blow with all the force he can command. So the whacking goes on, and almost every blow is a knock-down one, until the duellist last knocked down refuses to accept the club from his opponent. He having had enough, the duel is at an end, and the party breaks up. The severity of the punishment endured in these duels is marvellous. The club used has a jagged edge, and every blow struck draws blood, making deep cuts and fearful bruises.

521. Has a milkmaid ever become an English countess?

This was the case with Sarah, daughter of Thomas Hoggins, a small farmer in the village of Bolas, in the County of Salop. Henry Cecil, tenth Earl of Exeter, one of the sons of the great Lord Burleigh, married as his first wife Emma, only daughter and heiress of Thomas Vernon, of Hanbury, Worcestershire, from whom he was divorced in 1791. After the divorce, in June of that year, he resolved to look out for a second wife that he could mould to his own tastes and ways. In July, 1791, two years before his accession to the earldom, passing under the name of Jones, he obtained lodgings at the house of Mr. Hoggins, and there he was introduced to

their daughter Sarah, the milkmaid. The wooing and love-making of Mr. Cecil were brief, for on the 3rd of October he and Sarah Hoggins were married in the little church of Bolas. But still, who Henry Cecil was, and what was his parentage, remained a mystery to all, even to Sarah herself. He showed his easy circumstances by acquiring land, on which he erected the largest house in the neighbourhood, now called Burleigh Villa. Towards the end of December, 1793, when he had been married a little over two years, he read in a country paper the tidings of the death of his uncle, the old earl. He told his wife that business required him in Lincolnshire, and wished her to accompany him, and they rode away from Bolas, she seated on a pillion behind him. Not until they arrived in sight of the mansion did he inform his wife that he had become Earl of Exeter, and that she, the erstwhile milkmaid, was an English countess. The marriage formed the theme of Tennyson's "Lord of Burleigh."

522. What is the longest period of imprisonment to which a prisoner has been sentenced?

Three thousand and thirty-eight years, that having been the sentence upon Don José Galindo, Mayor of Alba, who had been convicted of falsifying public documents and of forgery. The trial took place at Palencia in July, 1893, and the prisoner, having been convicted of the offences charged against him, under 217 separate indictments, was sentenced to 217 terms of fourteen years each, making in all the very formidable total of 3,038 years. It will certainly puzzle the officials how to make their prisoner serve even a hundredth part of it. If the convictions had taken place in this country, the whole of the sentences, or all but two of the terms, would have been directed to run concurrently; but either this was not allowable under Spanish law, or it did not occur to the judge to so direct. In Texas, recently, a man was sentenced to ninety years' imprisonment for the murder of a city marshal. Major Bernarde, who conspired against the life of William III. of England, passed upwards of forty years in gaol, and died there. A longer instance, however, occurred in the Colony of Victoria, in Australia, where a man died in prison in 1891, aged 101 years, who had spent the last seventy-one of them in gaol.

523. Where is the longest submarine tunnel in the world?

The longest actually made is that under the Severn, which is 4 miles 624yds. in length, 2¼ miles of that length being from 45ft. to 100ft. below the bed of a rapidly-flowing tidal estuary. An

eight-mile submarine tunnel is projected under the Northumberland Straits to connect Prince Edward Island with the mainland of Canada, and a commencement made with the work in 1893, the contractor undertaking to complete it in two years. Another of 8½ miles is proposed with a view to connect Sicily with Italy. The tunnel under the English Channel will, if and when completed, be 23 miles in length, and Sir E. Watkin still appears to have confidence that the consent of the Government to its being made will sooner or later be obtained. A still longer submarine tunnel has been proposed to connect Ireland with Britain, to run between Island-Magee, County of Antrim, and Wigtonshire; the greatest depth of the tunnel, which will be 33 miles in length, being 500ft., and its steepest gradient 1 in 75. The estimated cost is eight millions, and the time required for completion ten or twelve years.

524. What is the capacity of the biggest game larder in this country?

Six thousand head, which is the capacity of the game larder at Sandringham, the Norfolk residence of the Prince of Wales. In December, 1892, it was nearly full, including 4,000 head of pheasants. Two or three years ago a Royal shooting party of ten guns killed in three days 5,895 head, of which 2,587 were pheasants. The sportsmen on that occasion included the Prince, his two sons, the Dukes of Edinburgh and Cambridge, Princes Christian, Leiningen, and Saxe-Weimar, Count Gleichen, and Lord Lorne. The Prince of Wales is a good and a remarkably cool shot. Every bird, hare, or rabbit shot on the Heir Apparent's estate is given away. When a big bag is made (and sometimes a day's sport produces over 2,000 head) no one is forgotten. The Prince's personal friends share the game with the tenants, the police, the railway officials, and the hospitals.

525. What has been the greatest gathering of Sunday-school children in this country?

That at Manchester for the 1893 Whit-Monday procession of Sunday-school children connected with the Church of England Sunday-schools in the city. The children, of whom over 20,000 were present, assembled in Albert Square, and, after singing a hymn, marched, headed by their respective bands and banners, through the principal streets of the city, all traffic being suspended. A large portion of the older scholars attended a subsequent service in the cathedral. Large gatherings of Sunday-school children take place in many northern towns on Whit-Monday, amongst which Stockport may be noted.

Probably the greatest gathering of day-school children in this country was that on the occasion of the Queen's Jubilee, on June 22nd, 1887, when Mr. Lawson, of the 'Daily Telegraph,' organized and entertained 27,000 school children in Hyde Park, London.

526. Which is the highest coach-road in the kingdom?

The highest coach-road—regularly used and recognised as such—in the kingdom is in the County of Aberdeen, where the coach route between Spittal of Glenshee Inn and Castleton of Braemar crosses the Grampians through Cairn Well Pass at an altitude of 2,060ft. In Inverness-shire, the old military road, from Fort Augustus over the Corryarrick Pass, is, at the highest part, 2,507ft., but this road, though a public highway, cannot be called a coach-road. In Cumberland, south of Alston, the road at Rossiney's House (the highest inhabited house in England) is 1,980ft. in height; and on Buxton Moor, the road at the Cat and Fiddle Inn (the highest inn in England) is 1,765ft. above sea level. The main road between Huddersfield, in Yorkshire, and Stockport, in Cheshire, which crosses Holme Moss in the mountainous district, on the borders of the two counties, which forms the backbone of England, is at an elevation of 1,859ft. above sea level. The highest road in the kingdom is that which terminates on the top of Ben Nevis at a height of 4,406ft. This road was chiefly constructed for the use of the Ben Nevis Observatory, and is for the most part cut out of the solid rock. This road can only be used by pedestrians or ponies.

527. What is the largest number of fish-hooks ever found inside a fish?

Fifty-nine. In May, 1893, a fisherman on opening a cod, caught off Flamborough Head, found no fewer than fifty-nine fish-hooks in its inside, all baited. The voracity of the pike is well known, but this instance on the part of the cod fairly beats the record.

528. In what part of Europe is the cheapest telephone service established?

In Switzerland, where the telephones as well as the telegraphs are owned by the Central Government, and are under the management of the Department of Posts and Telegraphs. This has proved a great advantage to the public, as the service is better and cheaper, the rates being lower than anywhere else in the world. The usual charge for subscribers is about £5 for the first year, £4 for the second, and £3 thereafter. These charges cover 800 messages

for each subscriber, any beyond being charged a halfpenny each. The American Consul-General at St. Gall described the Swiss telephone system in a recent report as the best and cheapest in Europe. Telegrams are received and delivered by telephone at a penny each, the advantages of which arrangement are considerable. In 1880 the first telephones in the country were those of a private company. This was at Zürich, the concession being for five years, the total number of instruments in use being only 144. Zürich alone has now 1,500. In 1886 the Government took over all the telephones, and in 1887 the number of subscribers had increased to 6,000, and long-distance telephones, connecting the Swiss cities as well as places in Germany, were introduced.

529. Which fishes "clothe" themselves?

Many of the crab-species of shell-fish do so. Professor Weldon, in a recent lecture upon crabs and their habits, stated that some species dress themselves elaborately by gathering bits of seaweed, chewing the ends, and sticking them on the shell, so as to look like a stone covered with weed. They spend hours, with the utmost perseverance, in making these pieces adhere, by trying the same piece over and over again till they succeed. They have a fine sense of symmetry, and always put a red piece on one limb to match the red piece they have put on the other, and a green piece to match a green piece, though how they know red from green in the dark pools where they live is hard to say, unless it is by taste or smell. When once their dress is completed, it improves the older it becomes, as the weed actually grows on them. Another species, with like habits and a most decided love for finery, was described, at a meeting of the Linnæan Society, as clothing themselves with bits of bright-coloured seaweed, sponges, and so forth. If the crab be despoiled of its garments, it at once proceeds to clothe itself again with care and deliberation, manifested not only in the selection of its articles of apparel, but in the proper shaping of them by means of its pincers.

530. What is the highest social position ever attained by a negro?

That of Bishop, which position has been attained and is presently held by Dr. Turner, a Bishop of colour, who recently visited London. Dr. Turner is the head of the missionary department of the American Methodist Church, and has in his time belonged to the Army. He was, indeed, the first coloured man to hold a commission in the American Army. The first and best known negro Bishop to visit this country was Samuel

Adjai Crowther, who rose from slavery, was appointed Bishop of the Niger District in Africa, and was consecrated in 1864, in Canterbury Cathedral. He retired from the bishopric in 1892. Two other native Africans were consecrated Bishops in 1893, in St. Paul's Cathedral, namely Dr. Isaac Olnwole and Dr. Charles Phillips, who were both educated at Sierra Leone, and have been appointed Assistant Bishops in Western Africa.

531. Where is there an hotel carried on by a Prince and a Duke?

This hotel is near Munich, in Bavaria, and is carried on by Prince Ludwig and Duke Theodor of Bavaria. It has had a most interesting history. A thousand years ago Benedictine monks discovered a small sulphur spring on a mountain, near Munich. They built there an hospital, which was used by their order until ninety years ago, when it was bought by King Maximilian., who filled it with sick folk. When the King died, his grandson, Duke Theodor, found he had not money enough to keep up the charity. After long and anxious consultations with his brothers, the honest, kindly Prince erected new buildings, and opened the house every year for three summer months as an hotel. It is patronized by many of the Royal and noble families of Europe; though it is open to any comer who will conduct himself respectably, and pay for his accommodation. Duke Theodor provides the food from his own farms, while his brother, Prince Ludwig, acts as host in the hotel. All guests are requested to leave on the last day of August. The house is then filled with scores of poor teachers, artists and authors, invalid soldiers, and poorly-paid clergymen, whom the Royal brothers have formally invited. The money made during the summer is devoted to their entertainment. The Duke and Prince remain in the house, lavishing kindness and courtesy upon their guests. When one company has been strengthened and cheered, another, equally needy and deserving, is invited to take their places, and this is done until it is time to receive paying visitors again.

532. Who owns the most valuable armchair in the world?

The Shah of Persia, who possesses an armchair of solid gold, inlaid with precious stones. About two years ago some of the stones were stolen from one of the legs of the chair, and the Shah, full of indignation, ordered the arrest of a number of servants and the keeper of the palace responsible for the furniture, with the intimation that if the thief was not dis-

covered the keeper would be beheaded. The culprit being eventually found, he was forthwith beheaded and his head carried on a pole by the Imperial bodyguard through the streets of Teheran. A valuable armchair is in the possession of the Earl of Radnor. It originally cost £40,000, and was presented by the City of Augsburg to the Emperor Rodolph II. of Germany about the year 1576. It is of steel, and took the artist about thirty years to make. The chair became the property of Count Tessin, Ambassador from the Court of Sweden to the English Court. Gustavus Brander afterwards bought it, as an antique, for 1,800 guineas, and sold it to the Earl of Radnor for 600 guineas. Of chairs once owned by British celebrities, some were lately sold by auction. Shakespeare's for £126; Gay's, £30; Theodore Hook's, £19; Bulwer Lytton's, £13; Anne Boleyn's, £10 10s.; Charles II.'s, £10; Mrs. Siddons's, £7; Pope's, £5 10s.; Mrs. Browning's, £5; Thackeray's, £3 10s.; Walter Savage Landor's, £3 10s.; Lord Byron's, £2 10s.; Sir Walter Raleigh's, £2.

533. Which nation first used the bagpipes?

The Assyrians are the first nation mentioned in the earliest records as being addicted to the use of this musical instrument, and as having taken it to India. The bagpipes, however, are, and always have been, in almost universal use throughout the whole of Asia, and their origin is lost in remote antiquity. Centuries before the Christian era the bagpipes were in use amongst the Assyrian, Arab, Persian, Hindu, and Chinese nations. They are quite as common in Italy as in Scotland, though a Highland piper of to-day would scorn any comparison between the full, strong sounds of the Scottish pipes, and the weak and squeaky result attained by the Italians. The ancient Greeks and Romans were acquainted with the instrument, and, curiously enough, the pipes were common in England long before they became the national musical instrument of Scotland. Carvings of the bagpipes are found in English churches at Boston, Great Yarmouth, and Hull.

534. Have fish ever been taught to perform tricks?

Fish have frequently been taught to come when called, and to perform various tricks. A gentleman had two brook trout in a small aquarium in his private residence that would jump out of the water and take flies held between his forefinger and thumb, and would also ring a little bell when they required food. They would also leap over little bars of wood placed about 2in. above the surface of the

water. It was a very simple matter to teach the fish these and similar tricks. As to the bell, a little tower containing a tiny, sweet-toned silver bell was fastened to the ironwork of the aquarium, while a piece of string attached to the tongue of the bell extended into the water where the trout were. On the loose end of the string an insect or other tempting morsel was placed, which the fish would at once seize, and, pulling the cord, the bell in the tower tinkled. After this had been repeated several days, the fish were left without food for some little time, until they made the discovery that they could obtain it by pulling at the string to which the delicacies had been attached. This at once became their habit on feeling hungry, and as that was pretty often, the bell had not much rest afterwards.

535. Where was there a daily newspaper published which the subscribers employed as a pocket-handkerchief after perusal?

In the Deccan, India. Mr. G. A. Sala, who describes this curious newspaper, says that it was lithographed every morning on a square of white cotton cloth. After having perused it the subscribers employed it as a pocket-handkerchief. Then they sent it to the local washerwoman, who returned it a clean white square of cotton cloth to the publishers, who lithographed and issued the same sheets again and again. At Prince Albert, a remote village in the Canadian North-West, a unique weekly paper is, or recently was, regularly published in the handwriting of its proprietor, editor, reporter, advertising agent, and printer, the five being one man. He adorned his lively four-page sheet with caricatures, rudely copied from the comic papers, and decorated his horse and stock "ads." with rough cuts. This paper appeared in purple ink from a gelatine copying process, or hectograph, and its editorials and local news were usually so clearly presented, that the little journal was influential in the territories, read with avidity in the newspaper offices of Eastern Canada, and constantly quoted as an authority.

536. What is the greatest number of acres inclosed in one building?

Thirty and a half, that number of acres having been inclosed by the building at the World's Fair at Chicago devoted to "Manufactures and Liberal Arts." Mr. George B. Post, of New York, was the architect. The entire length of the building was 1,687ft., or nearly one-third of a mile; its width, 787ft.; height of roof at central point, 237ft.; material, 17,000,000ft.

of timber and 14,000,000ft. of steel and iron. Compared with St. Peter's at Rome and the old Colosseum, says the architect, it was three times larger than the former, and four times larger than the latter. The great pyramid of Cheops would find space enough in the building, and might be conveniently viewed from the galleries, or standing room could be found for the entire Russian army. To secure wood for this huge building, 1,100 acres of Michigan had to be denuded of its pine trees.

537. In what British Colony are there most holidays?

In Canada, where the working days out of the 365 days in every year number only 270. Thus (including Sundays) the Canadians have ninety-five holidays every year. In India the number of holidays is very great. The Mohammedans, besides their weekly holy day of rest on Friday, have sixty-two special holy days, in addition to their month of abstinence, named Ramadhan, which occurs chiefly in September, making about 79 days in addition to their weekly Sabbaths. There are in India about fifty million Mohammedans to be affected in their lives by these celebrations, besides those with whom they have business transactions. Surgeon-General Balfour, in his "Cyclopædia of India," gives a list of eleven Hindu holidays, twenty Parsee ones, and twenty-two Mohammedan holidays, and as these do not generally coincide, they amount to about fifty-three altogether.

538. Which artist, while confined in an asylum, profusely decorated his cell with pictures?

This was done at Hanwell Asylum by an artist named Thomas Seale. Though mentally afflicted, this artist covered every inch of the walls and ceiling with beautiful oil-paintings. The pictures include a variety of subjects—sea-pieces, historical incidents, fairs, festivals, and others with classical motive. One of the more prominent is "The Restoration of Charles II., 29th May, 1660," showing the Merry Monarch on horseback surrounded by crowds of his subjects. The inscriptions, many of which are curious, are written with the brush in clear, good handwriting. The record of mad artists includes some famous names. François Lemoine, after completing the largest painting in Europe, the ceiling of the Hall of Hercules, at Versailles, containing 142 figures, which was 64ft. long and 54ft. broad, destroyed himself in a fit of insanity in 1737. Leopold Robert, the French artist, who spent his latter years at Venice, was crossed in love; and being

thus thrown into a hopeless melancholy, killed himself on March 20th, 1835. Benjamin Robert Haydon was found on the floor of his studio, killed by his own hand before his colossal picture, "Alfred the Great and the First British Jury," June 22nd, 1846. George Romney, born at Dalton, in Lancashire, in 1734, lived in London from 1762 to 1799, visiting only twice the wife and family whom he had left at Kendal. He returned to them to be nursed as an imbecile less than three years before he died, in 1802.

539. Where are the smallest birds in the world found?

In the New World exclusively. The humming-birds, of which there are nearly four hundred species, include the minutest specimens of bird-life known to zoologists. They are found on the American Continent, and nowhere else, and range from the neighbourhood of Cape Horn in the south to as far north as Sitka, and some species are found as much as 15,000ft. above the level of the sea. The smallest species of humming-bird is known to ornithologists as *Mellisuga Minima.* It only measures 1¼in. in length, and weighs but 20 grains. The finest collection of the skins of these birds ever made by a single collector was that exhibited by Mr. John Gould at the Zoological Gardens in 1851. It was bought by the British Museum for £3,000. Mr. Gould's elaborate work on "Humming Birds" extends to 5 vols. folio, with richly coloured plates, and took thirteen years to prepare, having been commenced in 1849 and completed in 1862. A copy of this book, with the supplement, cannot be procured now for less than £75.

540. Are troops provided with any ready means of crossing unfordable rivers?

An ingenious method has recently been adopted by the Russian troops. This is by means of leather bottles made from ox-hides, which can be easily used for the creation of rapidly manufactured rafts. Moreover, these bottles can be made on the spot by means of the hides of the animals which serve for the feeding of the soldiers, and which the troops themselves prepare. The bottles, to the number of from four to six, are connected by the legs, which turn up over the cross-pieces, and are tied thereto with twine. Tholes are arranged for the oars, and, finally, the frame is covered with 5in. planks for the carriage of infantry, and with 14in. ones for artillery. A leathern bottle made of an ox-hide weighs about 26lb. When it is inflated it has a sustaining power equal to the weight of the animal from which it is derived, say about 440lb. A raft of four bottles is capable of supporting ten men, while still

preserving a projection of 6in. above the surface of the water; with six bottles it will sustain twenty men and project from three to four inches above the surface. Among these men there are four oarsmen, who are at the sides. The German army has recently been supplied with new tents, which can easily be transformed into small boats.

541. Which inn in the United Kingdom has been longest kept by members of one family?

The village inn at Addington, in the County of Surrey, of which the Archbishop of Canterbury is the ground landlord. It is kept by a hostess whose family has been there since the days of Henry VII. On the death of the mother of the present hostess, she left no son but only three daughters to survive her. These wanted to carry on the business, but the Archbishop's wife thinking it unfitting, they received notice to quit. They were under this notice when the Archbishop died, and his successor, taking a more favourable view, allowed them to remain. The three sisters in turn took possession, and the present hostess is the last of them. The Jolly Millers Inn, at Newnham, Cambs, has been kept by a family of the name of Musk for the last 400 years. It is recorded in Cambridge annals that Queen Elizabeth once stopped here and drank a quart of "Ye Olde English Ayle" without getting down from her horse.

542. What is the most unusual offertory ever taken in a church?

Fresh-laid eggs. Such an offertory it has been customary for some time to have on one Sunday each spring, at High Halden Church, in Kent. On its being held on the 7th of May, 1893, 610 eggs were brought to the church, or one egg for nearly every person in the parish. These eggs were sent up, as usual, for the sick and very poor of the parish of St. Luke, Camberwell. Another unusual offertory was that of toys taken on the last Hospital Sunday at a special Children's Flower Service, held at Curzon Chapel, Mayfair. The first collection from the natives of New Guinea, at a meeting held in Port Moresby, in aid of the London Missionary Society, included: 325 spears, sixty-five shell armlets, ninety-two bows, 180 arrows, besides shields, drums, shell necklaces, feather and other ornaments, valued at £10. A correspondent reported in the 'Standard,' in the spring of 1892, an unusual offertory at a small town in Suffolk. When the money was counted, pieces of cardboard carefully silvered over, and of the exact size of threepenny-

bits, were taken from the bags, a device stamped upon them making them as much like those coins as possible.

543. Who smoked the first meerschaum pipe?

A shoemaker, Kavol Kowates, who, in 1723, lived at Pesth, the capital of Hungary. Besides being a shoemaker, however, he was one of Nature's handicraftsmen, being gifted with an intuitive genius for carving in wood and other material. This brought him into contact with Count Andrassy, with whom he became a great favorite. The Count, on his return from a mission to Turkey, brought with him a piece of whitish clay, which had been presented to him as a curiosity, on account of its extraordinary light specific gravity. It struck the shoemaker that, being porous, it must be well adapted for pipes, as it would absorb the nicotine. The experiment was tried, and Kavol cut a pipe for the Count and one for himself. This first meerschaum pipe, made and smoked by Kavol Kowates, has been preserved in the Museum at Pesth.

544. Has leather ever been made from the skin of a salmon?

Yes, in some parts of Asia the tanned skin of the salmon yields a prettily marked, scale like leather, and the skin of the ray gives a good imitation of morocco. Imitation porpoise leather is made from the skin of the seal, walrus, and white whale, while the American white-fish yields good upper leather. Alligator and crocodile leather are quite fashionable, and, in fact, there are few animals whose skins have not been utilized as leather at one time or another. Pig-skins are extensively used for gloves and children's shoes; while the thinnest, and at the same time one of the toughest, leathers tanned is the frog's skin. The most curious substance, perhaps, ever manufactured into leather is wood.

545. Has any peeress ever been appointed a company director?

The Duchess of Sutherland was recently appointed director of a mining company, which position she still holds. She is also the only lady director on the board of the London and North-Western Railway Company. The Baroness Burdett-Coutts is the principal partner in the London banking house of Messrs. Coutts & Co, and is said to always take her place at the meetings of the firm. It is not often that the seven signatories to a company are all ladies, but such is the case at Ross. The articles of association of the Ross Gas Company, Limited, are said to have been subscribed to by seven ladies. Several other ladies are directors of limited liability companies

Lady Frederick Cavendish is a member of the Council of the Girls' Public Day School Company, Limited. Lady Arthur Russell is also on the directorate. Lady Wolverton is a partner in the well-known banking house of Messrs. Glyn, Mills, Currie, & Co.

546. Where is there a milk-white lake?

In Iceland. Herr Thoroddsen, in his travels in that country, found there a very long lake stretching from the margin of the mighty glacier which forms the western side of the Vatria-Jökull. It is milk-white from the glacier water of which it is composed, and has been named the Langisjor. There are several white lakes near the settlement of Patagones, in Patagonia; they also occur in the Galapagos Archipelago. They are called salinas or salt lakes, and many of them are of considerable size, covering several square miles. They are very shallow, some of them having only a few inches depth of water over a flooring of pure white crystallized salt, while others are, in summer, completely crusted over with pure white salt crystals. About thirty miles from Tauranga, New Zealand, is a lake, the water of which is of a milky-white colour.

547. What is the highest position ever attained by a soldier from the ranks in the British Army?

The greatest promotion on record in the British Army is that of Sir John Elley, who was formerly a trooper in the Royal Regiment of Horse Guards. Sir John attained the full rank of General, and at the time of his death was Colonel of the 17th Lancers. He was the most intimate adviser of the Duke of Wellington at Waterloo, was knighted by His Majesty King George III., and represented Windsor in Parliament. The above facts are recorded on the marble tablet above his last resting-place in St. George's Chapel, Windsor Castle. The position of Lieutenant-General was attained by Joseph Brome, who, about 1726, when twelve years old, enlisted as a drummer-boy in the Royal Regiment of Artillery, then stationed in the Island of Minorca. He had a son who rose to the same rank, and a grandson who became a General. Luke O'Connor attained the position of Colonel, with the honorary rank of Major-General of the Royal Welsh Fusiliers (23rd Foot). Enlisting in 1849, at the age of eighteen, he was gazetted ensign on the 5th of November, 1854, and then rose, step by step, until he attained the above rank on the 9th of March, 1887. Major-General John Malone Sexton, recently promoted to that rank, on the Retired List of the Indian Army, also rose from the ranks. Major J. H. Banks rose from the ranks to the

command of a cavalry regiment; while A. Baldery also rose from the ranks to the position of Lieutenant-Colonel. Colonel Philip H. Eyre, of the 38th Regiment of Foot, rose from the ranks. He fell in the battle of Dulka on January 10th, 1885. The late Earl of Bantry, while Viscount Berehaven, being "plucked" for his Army examination, forthwith enlisted as a private in the Guards, and never advanced beyond that rank. This is probably the only instance on record of a private stepping from the ranks into an earldom.

548. What is the greatest speed in shorthand for which any writer has obtained a certificate?

Two hundred and forty words per minute. Mr. Henry Toothill, sub-principal of the Leeds School of Shorthand, successfully passed an examination in writing 240 words per minute, for ten minutes consecutively, and produced an accurate transcript of his notes within a specified time, and thus gained the highest speed certificate yet granted. At a further test, in the presence of Messrs. Pitman, at the Phonetic Institute, Bath, Mr. Toothill succeeded in writing 267 words per minute, on matter selected by the examiners. The second highest speed certificate was gained by Mr. G. W. Bunbury, Dublin, who passed the test successfully at 230 words a minute.

549. Are workmen in any part of the world allowed portions of every hour for smoking?

A Consular report states that such a custom existed at Malaga, in Spain, where the workmen are allowed fifteen minutes' leisure in every hour for the purpose of smoking cigarettes. Soldiers in the Italian army are allowed cigars as part of their daily rations. Austria Hungary far exceeds Spain as a country of smokers, and every male inhabitant of that country smokes on the average sixty-seven cigars, twenty-seven cigarettes, and ten pounds of tobacco yearly. Both, however, are exceeded in this respect by Japan and Siam. Amongst the Japanese all men and most women smoke, the girls beginning when about ten years of age; whilst in Siam everybody, with very few exceptions, smokes cigarettes, commencing at the unusually early age of four years. Child smokers are prevalent also in Mexico, where school-children particularly distinguishing themselves are allowed to smoke a cigar as they sit over their books.

550. Does any monument in a place of worship in this country serve as an advertisement?

This is the case with a monument erected in the Church of St. Saviour, London, which preserves the memory of Dr.

Taylor, a famous pill-maker. This monument represents the doctor in a reclining attitude. In one hand he holds a scroll, bearing a most enthusiastic eulogy of "Taylor's pills." It stands near the pulpit, where the congregation could not help seeing it. In the church at Godalming there is, against the south wall of the south transept, a mural monument bearing the following inscription : "Sacred to the memory of Nathaniel Godbold, Esq., inventor and proprietor of that excellent medicine, the Vegetable Balsam, for the cure of Consumptions and Asthmas. He departed this life the 17th day of December, 1799, aged 69." At the Père la Chaise Cemetery, Paris, there stands, or stood, in a conspicuous position, a monument to Pierre Cabochard, grocer, with a pathetic inscription, which, after relating the many virtues of the defunct, closes thus : "His inconsolable widow dedicates this monument to his memory, and continues the same business at the old stand, 187, Rue Mouffetard."

551. Is there a wingless bird?

Yes, the Apteryx (*A. Australes*), a large bird allied to the ostrich, has no wings, and is supposed to be the only species of wingless bird now in existence. This bird is a native of New Zealand, and is of nocturnal habits, feeding on snails and insects. In place of wings it has short stumps terminating in a hook. The Apteryx is much prized on account of its beautiful feathers. It is called by the natives "Kivi-Kivi," from its peculiar cry. The extinct Dinornis, or Moa, of New Zealand, was also a wingless bird. It is supposed to have been extinct for two centuries, but great quantities of its large bones have been discovered in several parts of New Zealand. From these bones complete skeletons have been constructed, which prove this bird to have been of gigantic size, varying from 10ft. to 14ft. in height. In place of wings it had merely rudimentary stumps.

552. What child's funeral has been attended by the greatest number of persons?

That of the child Emma Downton, in May, 1893, at Portsmouth. She was the victim of what was known as the "Portsmouth Tragedy," having been murdered by the nurse-girl in charge, who had taken her out in a perambulator, and then drowned her in a well. The funeral took place at the Kingston Cemetery, on Saturday, the 6th of May, when the road from the house of the child's parents to the cemetery was thronged by some 10,000 persons, whilst it was computed that no fewer than 20,000 persons were present at the service in the cemetery. The nurse was convicted of manslaughter

and sentenced to five years' penal servitude. Another funeral attended by several thousand persons was that of Ada Shepherd, eleven years of age, who was murdered at Acton on October 25th, 1880. The child was buried in the Hanwell Cemetery two days afterwards. The murderer, George Pavey, was executed at Newgate on December 13th, 1880.

553. In what country is private mourning compulsory?

In China, where private mourning is obligatory, and those who do not observe it are liable to a punishment of sixty lashes or a year's banishment. The duration of the period of mourning is fixed by law according to the relationship. For a father or mother it is three years, but for public functionaries it is reduced to twenty-seven months. During thirty days after a death in China, the nearest relatives of the deceased never shave themselves or change their clothes. At Chinese funerals it is customary with the family of the deceased to present the people attending the funeral with articles of mourning, generally consisting of gloves and cravats. The custom of employing women to weep at funerals is still practised in that country.

554. Which is the most permanent colour in flowers?

Yellow. It is a curious fact that animal and vegetable yellows should be so much more permanent than all other colours. The yellow of the petals of flowers is the only colour which is not discharged by the fumes of sulphurous acid. If a flower—heart's-ease (*Viola tricolor*), for instance—be exposed to these fumes, the purple tint will immediately disappear, but the yellow will remain unchanged; the yellow of a wall-flower will continue the same, though the brown streak will be discharged. The yellow pigment forms an insoluble compound with fatty matters, and is termed lipochrome. According to the density of this deposit, the colour is either a pale yellow or a deep one known as orange. In connection with the colour of flowers, Sir John Lubbock has made experiments, and found that bees display a decided preference for blue over all other hues. White is the prevailing colour among flowers; out of 4,000 selected species, no fewer than 1,193 were white.

555. Has a body of British workmen ever petitioned for a reduction of wages?

In 1884 the hand-frame sock makers at Oadby, a small village near Leicester, in order to get work which would otherwise have been done by men in Leicester, petitioned to be allowed to work for 7½ per cent. less than the wages then

current in that town. Upon hearing this the Leicester sock makers offered that, if their employers would not send all their work to Oadby, they would work at a 5 per cent. reduction. The masters refused this request, whereupon the Leicester workmen went out on strike in order to secure the reduction they had asked for. It is related that some years ago the shipbuilders employed in Denny's Shipbuilding Yard on the Clyde, hearing of some losses the firm had sustained, asked that their wages might be reduced, in order to assist their employers at a time of commercial depression. Three years after the firm of Messrs. Thomson and Sons, woollen cloth manufacturers, of Huddersfield, had converted their business into a co-operative industrial co-partnership, the workers, on hearing that the profits were net sufficient in 1890 to pay a dividend, are stated to have spontaneously and unanimously resolved to make it up amongst themselves. In 1893 an instance was reported from Warrington. Certain mill-hands hearing that their employers were meditating the suspension of production, by reason of the high price of coal rendering business unprofitable, the men voluntarily made overtures for a reduction of a penny in every shilling of their wages. This produced a saving of £40 per week, and although that did not nearly cover the loss consequent upon the increased price of fuel, the firm willingly consented to keep the mill going.

556. What is the size of the largest ox in the world?

Twelve feet from head to rump, and 5ft. 3in. in height. This ox, named Jumbo, is six years old, and weighs 3,840lb., while it takes an eleven-foot measure to go round his body. He is owned by Colonel William M. Singerly, of Philadelphia, and may be seen on the Colonel's stock farm at Gwyrend, Pennsylvania, where it occupies a stall about the size of a small house.

557. Have sleeping cars ever been provided on any tramway?

On the tramway which connects a number of towns near Buenos Ayres, South America, and which has a total length of some 200 miles, sleeping cars are provided for the comfort of the passengers. These cars are stated to be curiosities. They are four in number, 18ft. in length, and are furnished with four berths each, which are made to roll up when not in use. The cars are furnished with lavatories, water-coolers, linen-presses, and other conveniences, and are finished throughout with mahogany. The other rolling-stock comprised, a few years ago, four double-decked open cars, twenty platform cars,

twenty gondola cars, six refrigerator cars, four poultry cars (furnished with coops), eight cattle cars, two derrick cars for lifting heavy material, and 200 box cars.

558. Which letter of the alphabet is most frequently used in the English language?

The letter e, which is the only letter in the English language which is used oftener than 100 times out of every thousand letters employed. The e stands first also as regards frequency of user in the French, German, Italian, and Spanish languages. The following letters are the ten English ones most frequently used, namely :—

	Out of every 1,000 letters used.		Out of every 1,000 letters used.
E	137	R	70
T	88	N	66
O	76	H	65
S	75	A	64
I	71	L	40

As initial letters the order is very different; the order of the ten most frequently so used being: R, S, C, P, A, T, D, M, F, and I. The four letters most seldom used are z, j, q, and x; while the four least frequently used as initial letters are K, Y, Z, and X. Other languages would require the various letters in different proportions. In Latin and French q and u would be deficient, h would be in excess, and w would be needless. The Welsh language requires a larger supply of d, y, w, and l, and does not require j, k, q, or x.

559. Where are University degrees bought and sold?

This is the case in connection with some of the smaller Universities and colleges in the United States. Some Universities in Germany used to be equally lax in granting degrees "in absence" for a fee, and (sometimes) on receipt of a Latin essay which could easily be written by a deputy. Thus, an Englishman in the last century obtained the degree of Doctor of Divinity (in absence) for a certain "Anglicus Ponto," who turned out to be his dog. Professor Mommsen's exertions some years ago stopped this practice in Germany, and it has also been checked in the United States. It is still, however, open to obtain an American degree for a payment ranging from £7 to £10. Not long ago the English secretary of an American University notified the British public that he was prepared to secure for any man desiring it a degree or diploma, of the University he represented, for a nominal sum. Either the degree of LL.D., or M.D., or any other is available, if the person desiring it is willing to pay the sum required, varying from £7 to £10. Of course, some evidence of study

and ability is necessary, but no examination is required. During the last few years a large number of degrees of this sort have been acquired by men practising as doctors, and by clergymen and others.

560. Which British artist was elected mayor of his native town?

Sir Joshua Reynolds, son of the Rev. Samuel Reynolds, Rector of Plympton St. Mary, was born at Plympton on the 16th of July, 1723. Fifty years afterwards, in 1773, two honours were conferred upon this celebrated artist. He was created Doctor of Civil Law (D.C.L.) by the University of Oxford, and he was elected Mayor of Plympton, his native town, a circumstance which gave him great gratification. He presented the Corporation with his portrait upon the occasion, which that body subsequently sold. Soon after Sir Joshua's election as mayor, it happened that he was walking with some friends in Hampton Court gardens, when they suddenly and unexpectedly met the King, accompanied by some of the Royal Family. The King called Sir Joshua to him, and said that he had been informed of his election to the office of mayor of his native town. Sir Joshua assured His Majesty that it was an honour which gave him more pleasure than any he had received in his life; but, recollecting himself, added, "except that which your Majesty was graciously pleased to confer on me."

561. What cathedral in this country has been longest in course of erection?

Bristol Cathedral was commenced by Abbot Knowle in 1306, and was only completed in 1888, with the erection of the western towers, and thus 582 years elapsed between its commencement and its completion. Gloucester Cathedral was in course of erection from 1089 to 1514, or a period of 425 years. The erection of Peterborough Cathedral extended over 410 years; that of Durham, 407; that of Exeter, 366; St. David's, 342; Lichfield, 272; Norwich, 192. Canterbury Cathedral is erected on the site of the first Christian church ever built in England. The erection of York Cathedral occupied 301 years, from 1171 to 1472. The first stone of its choir was laid on July 19th, 1361, by Archbishop Thoresby, a statue of whom is to be seen over the magnificent and incomparable east window of this, the finest Gothic church in England. This window is said to be unrivalled in the world for its magnitude and beauty; it is 78ft. in height and 33ft. in width, and contains 200 compartments. The large window in Gloucester Cathedral is rather larger, being 72ft. by 38ft., but the under part is unglazed.

562. Which church in this country has the widest nave?

The nave of St. Michael's Church at Coventry, which has two aisles on each side of the central one, is 125ft. in width, the whole church being 293ft. 9in. in length. The nave of York Minster is 104½ft. in width and 264ft. in length; next to it in width is the nave of Brompton Oratory. The order, or entablature, is carried to a height of 50ft. on twin Corinthian pilasters with a pedestal base; both composed of solid blocks of Devonshire marble, many of which weigh three tons each. The height of the nave to the interior vaulting is 73ft. Intersecting the nave at its junction with the Sanctuary are two transepts of 50ft., and between them rises the dome, 53ft. in interior diameter, and about 125ft. in height from the floor level to the ceiling. The nave of the Cathedral Church of St. Paul's, London, is 102ft. wide and 212ft. in length. Westminster Abbey has a nave which measures 71¾ft. in width and 166½ft. in length. The entire church is 511½ft. in length. Probably, in proportion to length, no church has a wider nave than than of St. Mary Magdalen in Oxford, which has four aisles. The nave is through its whole width from east to west 30yds., or 90ft., while the whole length of the church is 26yds., or 78ft.

563. In what part of the world is there still a place of refuge, on reaching which criminals are free from capture?

In Scotland there still exists a sanctuary for debtors in the Abbey and Palace of Holyrood, with its precincts. The sanctuary is placed under the control of a bailie, appointed by the Duke of Hamilton. When a debtor retires to the sanctuary, he has twenty-four hours' protection, but in order to extend the privilege longer he must be enrolled on the books of the Abbey. The sanctuary affords no protection to a criminal or fraudulent debtor, or to a Crown debtor. Another sanctuary exists in Hawaii, called the Rock of Refuge. If a criminal reach this refuge before he can be captured, he is safe so long as he remains there. His family can and usually do supply him with food until he is able to make his escape, but he is never allowed to return to his own tribe. In China, the Buddhist religion allows men to become priests at an advanced period of life for the purpose of escaping from impending justice. In some instances, Buddhist temples are regarded as inviolable sanctuaries for transgressors of the law. Formerly there were many sanctuaries in England, just as the Cities of Refuge were appointed by the laws of Moses for one who had killed another intentionally, to prevent the relations of the slain taking the

law into their own hands, as the Arabs still do in such cases. The Church of St. John at Beverley, in Yorkshire, was thus privileged in the time of the Saxons; St. Buryan's, in Cornwall, by Athelstan, in 935; Westminster Abbey by Edward the Confessor, as Broad Sanctuary still commemorates by its name; St. Martin-le-Grand, London, in 1529. This immunity for crime being much abused, it was limited by the Pope in 1503, at the request of Henry VII. of England, and much reduced in 1540. Among other places in London where persons were free from arrest were the Minories, Salisbury Court, Whitefriars, Fullwood's Rents, Mitre Court, Baldwin's Gardens, the Savoy Clink, Deadman's Place, Montague Close, and the Mint. This security was abolished in 1697, but lasted in some degree till the reign of George II. in 1727.

564. Did any horse ever come in second in every race run in any one year?

Such has been the case with Mr. C. D. Rose's horse, Ravensbury, which was second in every race it entered for in the year 1893, with the exception of the Forty-fifth Triennial Produce Stakes, run Wednesday, September 27th, in which it came in a winner. In 1892 he was second to Queen of Navarre at York, and to Isinglass for the Middle Park Plate; while in 1893 his record was as follows:—

	Value of Stakes.
Second to Watch Tower, Newmarket Biennial	£570
,, ,, Isinglass, Two Thousand	4,250
,, ,, ,, Derby	5,455
,, ,, Ragotsky, Grand Prix of Paris	10,667
,, ,, Isinglass, St. Leger	5,300

In 1856 Mr. Padwick's horse, Yellow Jack, was equally unfortunate in being second in all his races for that year. His record was:—

	Value of Stakes.
Second to Fazzoletto, Two Thousand	£2,100
,, ,, One Act, Chester Cup	3,700
,, ,, Ellington, Derby	5,600
,, ,, Fly-by-Night, Ascot Derby	900
,, ,, Rogerthorpe, Goodwood Cup	400
,, ,, Prince of Orange, Sweepstakes, Doncaster	600

565. Are any workhouse children in this country taught the art of begging?

Many of the children in the East-end of London are trained in the arts and blandishments of begging by old hands at the business who have retired from active operations. A curious sight is to be witnessed on the road facing the Epsom racecourse. On Derby Day and Oaks Day a large number of the children attending a workhouse school can be seen holding

out their caps for coppers from the passers-by. This might be termed an object-lesson in mendicancy, and thus many children are shown how profitable the begging trade, under favourable circumstances, can be made. The money they collect is expended on a school treat at the Crystal Palace. The amount collected in 1893, all in coppers, was £144 12s. 4d.

566. In which European country are mining royalties highest?

This, according to the report of the Royal Commission on Mining Royalties, is the United Kingdom. They state that the minimum royalty in the United Kingdom is higher than in France, Belgium, Germany, or any other European country. The amount paid as royalties on coal and metal worked in the United Kingdom in 1889 was £4,665,043. The United Kingdom royalties on coal are said to average from £1 to £2 per acre of surface area, though in exceptional cases they vary from £2 to £5. On iron-stone the royalty varies from 3s. 9d. to 6d. per ton, and in lead mines the royalty is fixed on a sliding scale. It is difficult to compare royalties in this country with what are supposed to be equivalent payments in other countries, for the term "royalty" does not occur abroad, and the royalty system as in operation in this country does not seem to be understood by those engaged in mining in foreign countries. In Belgium, it is stated that royalties ranging from 1s. 3d. to 4s. per ton are paid, but there, as in nearly all foreign countries, the minerals are worked under concessions from the State, and payments by way of special taxes and license fees have to be made in respect of such concessions. Mr. James O'Connor, Secretary of the National Coalporters' Union, says, that of the 30s. paid in London for a ton of coal, the landlord receives a royalty, or mining rent, of 1s. 3d.; the colliery lessees and merchants, 16s.; the railway and shipping interests, 8s. 1d.; the miners, 3s. 1d.; the coal-porters and others, 1s. 7d. It is certain that the miners receive more in this country than in any other European country, though their share may seem small even in the United Kingdom. But the landowner receives less than anyone else, while his estate is ruined for all other purposes.

567. Where is the most popular open-air bathing pond in this country?

In Victoria Park, London. In this park as many as 25,000 bathers have been counted on a morning in August, before eight o'clock. During the summer of 1893, there were never fewer than 4,000 or 5,000 bathers in the lake from four

o'clock in the morning up to 8 a.m., and between 20,000 and 30,000 bathe there in the course of the evening. The lake is about 300ft. long, and varies in depth from 3ft. to 5½ft. The Serpentine is one of the most popular open-air bathing places in this country. From January 1st to August 20th, 1893, the total number of bathers were 144,979 in the mornings and 123,589 in the evenings, the gross total being thus 268,568, or considerably more than a quarter of a million.

568. Where is the most heavily insured building in England?

In the City of London, the Cathedral Church of St. Paul being insured for £95,000, in ten offices. Great precautions are taken to prevent this church being injured or set fire to by lightning, on a plan suggested by the Royal Society as far back as 1769. The seven iron scrolls which support the ball and cross are connected with other rods, used as conductors, which unite them with several large iron bars descending obliquely to the stonework of the lantern, and connected by an iron ring with four other iron bars to the leaden covering of the great cupola, a distance of 50ft. Thence the communication is continued downwards by the rain-water pipes to the lead-covered roof, and thence again by leaden water-pipes, which pass down into the earth, partly through iron and partly through lead. The clock and bell towers are similarly protected. If Moscow Cathedral were insured to cover the cost of erection, the policy would require to be for two and a half millions sterling.

569. Which cathedral in the world has the loftiest choir?

The Cathedral of St. Pierre, in Beauvais, France. Its choir, which is the loftiest in the world, is 153ft. in height from the pavement to the roof. The lofty choir of St. Peter's at Rome is 150ft. from the floor. Another cathedral remarkable for the height of its choir is that of Amiens, which is 140ft. high. The loftiest choir in this country is that of York Minster, which is 120ft. in height. The choir of Westminster Abbey is 102ft. high, while that of St. Paul's, London, is 100ft.

570. Is there any surpliced choir of women choristers in this country?

One such choir is to be found in London, at St. James's, Westmoreland Street, Marylebone, where the women choristers, wearing cassocks, surplices, and collegiate-caps, took their places in the choir for the first time on Sunday, the

3rd of July, 1892. Surpliced choirs of women choristers have also been installed at churches in Manchester, Birmingham, Wakefield, and Winchester. Surpliced women choir singers have been introduced into the Epiphany Church choir in Washington. They wear plain gowns of white, with flowing sleeves and deep edges of black. On their heads they wear simple toques, with tassels of cord. The Rev. H. Hutchings, Kilclooney Rectory, Markethill, Armagh, has lately built at his own expense an abbey in the rectory grounds, and formed a female choir as a special feature of its services. The choir consists of about twenty ladies, each of them wearing a robe and girdle of white linen and a Bishop Cosin's cap. At the late Canon Ellerton's church at White Roding, Essex, the choir entirely consisted of little girls, dressed in white robes and caps.

571. Has a newspaper ever been printed on calico?

The first number of 'Berthold's Political Handkerchief,' a newspaper printed on calico, is dated Saturday, September 3rd, 1831. The reason it was thus printed was to evade the stamp duty, which at that time was 6d. on each newspaper, whereas the handkerchief was sold for 4d. It was a four-page sheet, measuring 18in. by 11in., illustrated on the front page with a woodcut entitled "Napoleon Crossing the Alps," and contains, with other matter, the programme of the ceremonial of the coronation of King William and Queen Adelaide, and also what is said to be "A remarkable prophecy of the Emperor Napoleon as regards England, France, Russia, and other European States." A newspaper printed on calico was published in Greenock, 1849. It was known as the 'Greenock News Clout,' and when read could be used as a pocket-handkerchief.

572. Who was the first Oriental to have the title of baronet conferred on him?

Sir Jamsetjee Jeejeebhoy, Bart., an eminent Parsee merchant, of Bombay. He was born in Bombay in 1783, of humble parentage, and had to make his own way in the world. As his wealth increased, the tendency to share it with the needy, or to spend it for the public benefit, began to develop itself. In 1822 he released all the poor debtors confined by the Court of Requests from the Bombay gaol, by the simple process of paying their debts. From that time to his death, in 1859, the stream of his beneficence scarcely slacked in its flow. He dispensed in philanthropic services the vast sum of £300,000. The dignity of baronet was instituted in England in 1611, the first baronet being Sir Nicholas Bacon, of Redgrave Hall,

Suffolk. A similar dignity was instituted in Ireland in 1619, the first baronet being Sir Dominick Sarsfield, Chief Justice of the Irish Court of Common Pleas. The first Scottish baronet was Sir Robert Gordon of Gordonstone.

573. In what part of the United Kingdom was each parish church in olden times provided with a gun?

In the Isle of Wight, where, in the time of Edward VI., every parish church possessed its gun. They were all of brass, and cast by two brothers named Owen, or, as the inscription on the guns ran: "Richard and John Owvine, Brethren." Most of these guns were sold early in the present century. The guns of Calbourne and Shalfleet churches were sold about 1808; that of the Calbourne gun being noted in the parish register for that year. Carisbrooke gun was sold as recently as 1850 for £30, to raise funds to pay for the building of a wall round the additional burying ground. This gun was a year or two ago seen at the Tower, with the name "Caresbrook" on it, lying on the ground amongst other ancient pieces of ordnance. Brading gun, the only one now on the island, lies at Nunwell, on the lawn in front of the house. It has the names of the Owvines on it, and the date 1549. At a general muster held in 1683, twenty parish church guns were brought to Carisbrooke Castle. Church towers in this country were not infrequently used as parochial fortresses. This was especially the case on the English border, as in Cumberland, where the towers of Newton Arlosh Church, of the Church of Burgh-on-the Sands, and of Great Salkeld appear to have been constructed with a view to shelter the inhabitants of those villages upon any sudden invasion from the borders of Scotland, and for that purpose were strongly fortified. The church towers at Manorbier, St. Florence, Penally, Warren, St. Twinell, and St. Petrox have all been built so as to be of great service from a military point of view.

574. Which animal walks on its head?

The cuttle-fish, belonging to the highest class of mollusca—or *Cephalopoda*—a term derived from two Greek words, the former signifying a head and the latter a foot, and so applied because the feet or arms, as they might also be called, are arranged in a circular manner round the mouth. A cuttle-fish, when it is what may be called walking, either on land or at the bottom of the sea, walks with its head downwards, its mouth touching the ground, the arms extending and grappling some supporting object and drawing the body forward; at the same time the arms at the opposite side are contracted and folded up, so as to assist by a contrary movement. On shore the

movement of these animals is very slow. On the other hand, they swim very rapidly, assisted by all their arms. The ratel, which is familiar to every visitor to the Zoological Gardens, is in the habit of constantly going through the most extraordinary performances. Every time it reaches either end of its course, it puts its head on the ground, turns a complete somersault, and resumes its course. At intervals it walks into its bath, rolls about the water for a second or two, and then addresses itself with renewed vigour to its curious antics.

575. Is there any simple means of purifying the air of schools, factories, etc.?

The following is perhaps the simplest method of doing so. Pure oil of turpentine mixed with about 1 per cent. of oil of lavender flowers, and used in the form of a spray from an atomizer, purifies wonderfully the air of school, factory, sleeping, and other rooms. It is surprising how refreshing this mode is for the occupants, the action being due to the ozone formed, which at the same time is perfumed with fragrant lavender. Ventilation and pure air are such essentials to health, especially where large numbers of workers or children have to remain in shop or room for any length of time, that purification of the air in some way such as the above should be enforced by regulations.

576. What is the weight of the heaviest married couple on record?

Eighty-two stone. This couple—Mr. and Mrs. Chauncey Morlan—who recently visited this country, have the unprecedented weight of 1,148lb. Mrs. Morlan is described as a pleasant-faced, bright-eyed, intelligent young woman, and a first-rate conversationalist. Born at St. Louis, she was, when only twenty years of age, 6ft. 2in. in height, and turned the scale at 40st. Curiously enough, neither of her parents were stout. From her childhood she took on flesh to an alarming extent. Mr. Morlan is his wife's senior by one year only, is 5ft. 10in. in height, and weighs 42st. He was born at Rockville, and when a lad was nearly as broad as he was long. He has been exhibiting for ten years, and enjoys the life immensely. Hanson Craig, of Kentucky, was a considerably heavier man than Mr. Morlan. His weight was 56st. 8lb., and it required 37yds. of cloth to make him a suit.

577. What was the form of the most peculiar typewriter ever made?

This consisted of rubber gloves, embossed with the various letters and other characters required in typewriting. These

characters were distributed over the upper and under surfaces of the gloves, and were to be impressed on the paper by the proper movements of the hand, the inventor claiming that thus the results ordinarily achieved by a combination of springs and wires might be accomplished by the muscles and nerves of the hands themselves. The most useful letters, those most frequently required, were placed on the middle joints of the fingers of the two hands. It is almost needless to say that a considerable amount of ingenuity was required to work it, and insure the printing of the proper characters.

578. Which city's gates in the United Kingdom bore the most curious inscription?

Those of the ancient city of Galway, in Ireland. The gates faced north, south, east, and west respectively, and were built to ward off attacks from the four warlike and war-loving Irish tribes that dwelt around. On each gate was a motto, alliterative and pregnant with meaning. The north gate bore this inscription: "From the ferocious O'Flahertys, good Lord deliver us." On the west gate was: "From the murderous O'Maddens, good Lord preserve us." The inscription over the south gate read: "From the devilish O'Dalys, good Lord defend us"; while that on the eastern gate was: "From the cut-throat O'Kellys, good Lord save and keep us."

579. Who is the possessor of the most valuable fishing-rod?

H.R.H. the Princess of Wales. It was presented to her by Messrs. G. Little and Co., of London, through the President of the National Fisheries Exhibition, held at Norwich, 1881, and is worth £40. The rod is in six joints, is mounted in gold, and is fitted with carved ivory stoppers, showing the Prince of Wales's feathers. Some expensive rods are made, for exhibition purposes, with ivory and inlaid butts, and silver and gold fittings. Various materials are used for the manufacture of fishing-rods; of wood—lancewood, green-heart, washaba, nicobar, blue mahoe, hickory, ash, red deal, hazel, also snakewood, cedar, and beefwood; of cane—East Indian mottled, South Carolina white, Japanese or Tonquin, Spanish white cane, bamboo, or jungle cane. The wood arrives in balks, measuring 18ft. to 20ft. long, by 20in. to 24in. square. These are sawn up into planks of 5ft. to 6ft. long, and about 3in. thick. These are stored in large timber sheds, specially constructed with a view to the thorough seasoning of the wood, which takes from one to three years. When perfectly seasoned, these planks are again taken to the

sawmill, and divided into lengths of the required thickness, and then handed to the rod maker, who, by hand, with a plane, reduces them to the required size. Top joints are usually spliced with jungle cane. The ferrules are then put on, and the rod tapered, so that an even play is obtained from butt to tip. This being a work of great nicety, only a few excel in producing a first-class rod. Boring is a very delicate operation, requiring great skill and care, or otherwise the butt will be destroyed by the long auger passing through the side. Rods are made in all lengths, from 9ft. to 20ft., and in two to twelve joints.

580. Who has the finest collection of book-plates (ex-libris) in this country?

Mr. A. W. Franks, C.B., of the British Museum, has one of the largest, if not the largest collection extant, whilst Mr. James Roberts Brown, F.R.G.S., the chairman of the Ex-Libris Society for the year 1893, has a beautiful collection, all duly classified ; it numbers several thousand specimens. Dr. Howard, of the Heralds' College, has a collection which contains many thousands of book-plates of all nationalities. He is known to have refused ten guineas for a single specimen of the sixteenth century. Collectors of book-plates have been known to buy up whole libraries of second-hand books, merely for the sake of the treasures to be obtained from a few of them in the shape of rare and curious plates, which may sometimes prove to be worth a great deal more than the books out of which they are removed. The earliest engraved book-plate at present known is that of Sir Nicholas Bacon, father of Lord Chancellor Bacon, which is dated 1574.

581. Has a straight rainbow ever been seen?

This peculiar phenomenon was witnessed at Aboyne on the morning of the 26th of May, 1893. Stretching along the falls of Morven and Culblean, and slightly below the top of the former, was a magnificent ribbon, exhibiting the full spectrum of colours from red to violet—in fact, a perfect rainbow ; but without the slightest curve. The sun was shining brightly in the east, while it was raining on Morven, which accounts for the colours, though it is not so easy to account for the absence of the arch. The lowest part of the ribbon showed the least refrangible colours. A white rainbow was seen in Edinburgh in January, 1878. A very remarkable mist-bow, or fog-bow, was witnessed by Mr. Edward Whymper, in descending the Matterhorn, immediately after the disastrous accident which signalized his first ascent in 1865, and is figured, as well as described, in his work. In this case the circular bows were

accompanied by straight, perpendicular, iridescent lines, which appeared by their intersections with the bows to produce figures in the form of a cross.

582. Has an elephant ever performed on the tight-rope?

Pliny, the famous Latin historian, relates that Nero gave great and most magnificent games in honour of his mother, on which occasion an elephant introduced into the theatre mounted an arch on the top of it, and from thence walked upon a rope with a man on his back; and at the Floral Games, Galba exhibited rope-dancing elephants. He records another exhibition of four elephants advancing along ropes. Many menageries and animal trainers have exhibited tight-rope walking elephants. Cope, in his "Natural History," relates some curious instances of elephantine cleverness. One was known to write Latin characters on a blackboard with a piece of chalk, in a very orderly manner, upon his keeper showing him the figure of each letter. While thus employed, the elephant's eyes might be observed studiously cast down upon the writing, and exhibiting an appearance of great skill and erudition. Four young elephants, trained by Mlle. Telezerow, were able to perform on the tight-rope and walk on upright bottles after six months' instruction. The first Horse that walked on the tight-rope belonged to Mr. Cornford, whose establishment had its head-quarters in the island of Jersey, and is now called "Rousby's." A carriage dog was recently shown in a circus which had been taught to perform very cleverly on a single wire.

583. Has a lady ever been admitted to the membership of the Royal Academy?

Two ladies have been admitted to the membership of the Royal Academy. One was Maria Angelica Kaufmann, a distinguished artist, born at Coire, in the Grisons, in Switzerland, October 30th, 1741. She acquired the first principles of drawing and painting from her father, whom she soon excelled. At Milan, Florence, Rome, and Naples she increased her skill; and when, in 1766, she came to England, she was patronized by Royalty, and her reputation and success quickly increased. In 1768 she became one of the first members of the Royal Academy. She remained here seventeen years; married Antonio Zucchi, a Venetian painter, in England, in July, 1781, and died at Rome on November 5th, 1807. Many of her paintings were engraved by Bartolozzi, but her reputation not resting, it is said, on any solid basis of excellence in art, has passed away. The other lady member, Mary Moser, after

wards Mrs. Lloyd, was the daughter of the first keeper of the Academy. She obtained distinction as a flower painter.

584. What European body of actors have official robes?

All the members of the "Comédie Française" company of actors, Palais Royal, Paris, have gorgeous official robes of scarlet and ermine. In other French theatres they are obliged to provide their own dresses; a serious consideration, with modern requirements, when one character-costume may cost several thousand francs. The dress worn by Febre in "Henri III. et la Cour" is said to have cost 10,000 francs (£400). The dresses of the "Comédie Française" are magnificent. They are not usually ready before the dress rehearsal, although one actor insists upon rehearsing for some time in his dress, being anxious to take off the effect of the glare, which he does not consider artistic, and also to become accustomed to his strange attire, so as not to feel in any way impeded by it.

585. In which country is the largest amount given yearly to charitable institutions?

In the United States. The State of New York alone gives more to charitable institutions than any European country. The three European countries which stand at the head of the list of givers for charitable purposes, and the amounts given annually, are: The United Kingdom, £10,040,000; France, £5,554,000; and Italy, £2,280,000. The New York State Board of Charities, in their report published in 1892, stated that the amount devoted in the previous year to charitable purposes in that State was £10,800,000 (54,000,000 dollars), exclusive of money raised for such purposes by small societies and private persons. An article in a New Orleans paper, commenting on this state of things, says that enormous sums find their way to the charity coffers of the United States, and points out that the tendency of charity on this stupendous scale is to establish and foster an ever-increasing army of those who depend upon the aid of the charitably disposed, and cease to put forth their power of self-maintenance though well able to do so.

586. What is the weight of the heaviest common trout ever caught by an angler?

Twenty-nine pounds, which was the weight of one caught on Loch Stenness, in Orkney, in 1888. One caught on a branch of the Avon at Salisbury weighed 25lb. One caught by Sir Trevor Wheler in 1828 on the River Avon, between Ringwood and Christchurch, whilst trolling for pike, weighed 20½lb. In November, 1846, a trout 40in. in length, weighing

21½lb., was caught in the Tawe, near Drayton Manor, and presented by Sir R. Peel to Professor Owen. A portrait of this fish is still in the possession of the family of the late Sir Robert Peel. A trout, captured by a man named Turpin, in 1888, on the Itchen at Winchester, weighed 16lb. 2oz. A large trout was caught on May 16th, 1893, at Iwood, Congresbury. Its weight was 13lb. 4oz., its length 2ft. 6in., and its girth 1ft. 6in. The usual weight of sea trout runs from 1lb. to 3lb. or 4lb., but larger specimens are constantly met with—one, for example, a male, was taken in July, 1840, at Sanstill fishery, on the Tweed, 37in. in length, 22in. in girth, and which weighed 24½lb.

587. Has a pirate ever become an English archbishop?

Launcelot Blackburne, who was appointed Archbishop of York in 1724, is said to have been a pirate in early life. When a youth at Cambridge he was so wild that nothing could be done with him, and he finished by taking a fiddle out of his tutor's room, and played his way up to London. There, driven by want, he shipped as cabin boy on board a collier, which was captured in Yarmouth Roads by the celebrated pirate ship, *Black Broom*, then commanded by the dreaded Redmond of the Red Hand. Blackburne contrived to find favour with the captain and crew of the pirate, and served in her for several years till, on the death of Redmond, he was elected captain. After making a large fortune by piracy, he returned to England; Sir Robert Walpole, the great Whig statesman, being then in power. Blackburne returned to Cambridge, restored the fiddle (which he had never parted with in all his wanderings) in a silver case to his tutor, took his degree, and was eventually ordained. As Blackburne was a Whig, Sir Robert Walpole found him and his money very useful, and after a variety of Church preferment, by the influence of Walpole, he in due season mounted the archiepiscopal throne of York.

588. Who owns the most valuable pair of skates in the world?

The Duke of York is president of the National Skating Association, and through the medium of the society was recently presented with a handsome pair of skates as a wedding present. They are worth £30. There is among the many treasures at Windsor Castle a pair of skates which were presented many years ago to the late Prince Consort. They are of exquisite workmanship, and were valued at seventy-five guineas. It is said that the Prince, when he accepted the gift, expressed the opinion that the skates were too good to wear,

and that he should place them among the many other articles which he valued. He kept his word, and had another pair made which he could use. The Princess of Wales is fond of skating, and has a pair of skates which are reckoned to be worth £20.

589. Where is the longest bridge in the world?

The longest bridge in the world is said to be one called the Lion Bridge near Sangang, in China. It is stated to extend 5¼ miles over an arm of the Yellow Sea, and to be supported by 300 huge stone pillars, that the roadway is 70ft. above the water, and is inclosed in an iron network, the breadth being 20ft. A marble lion, 21ft. long, rests on the crown of each pillar. The bridge of Esseck, in Hungary, built over the rivers Danube and Drave, is five miles in length, fortified by towers at certain distances; but it may be rather regarded as a continuation of bridges. The new Tay Bridge was built to replace the one blown down on December 28th, 1879. It is situated 60ft. further up the river than the old bridge, and is about two miles long. The greatest bridge in the world in respect of enormous dimensions is the Forth Bridge, completed about five years ago. Its length, including viaduct, is 8,098ft.; length of central girder, 350ft.; length of spans, 1,710ft. each; diameter of piers, 49ft.; length of the three cantilevers, 5,350ft.; width of each cantilever at top, 33ft.; average weight of masonry in each of the great piers, 18,000 tons; weight of steel used in the entire structure, 51,000 tons. The cost of the bridge and its connecting lines of railway was over £3,000,000.

590. Where are the largest coral islands found?

Coral formations have been divided, according to their geological character, into three classes. The first fringes the shores of islands or continents (fringing reefs); the second, rising from the deep ocean, at a greater distance from the land, encircles an island, or stretches like a barrier along the coast (barrier reefs); the third, inclosing a lagoon, forms a ring or annular breakwater round an interior lake (atolls or lagoon islands). The first are not coral islands. The largest of the second class is that which fronts the north-east of Australia. It has a length of over a thousand miles, with an average width of thirty miles, or an area of over 30,000 square miles. This monster reef is known as the "Great Barrier Reef," and is the largest known coral formation on the globe. Of the third class, amongst the largest atolls known are those of the Maldives, in the Indian Ocean. The largest atoll of this group is eighty-eight miles long and

twenty broad, while another is forty-four miles by thirty-four miles. The point of special interest in the structure of these atolls is the occurrence of atolls within the larger atolls. The isles of the lagoon and those of the encircling reef are in many cases annular reefs, each with its own little lagoon. Gems within gems are here clustered together. The Maldive Islands form the Kingdom of Malediva, with a population of 150,000, the ruler of which glories in the title of "Sultan of the Thirteen Atolls and Twelve Thousand Isles." There are many large coral islands in the Pacific Ocean. Nairsa, or Dean's Island, in the Paumotic group, has an area of 1,000 square miles; Menchikoff Atoll, in the Carolines, has an area of 500 square miles; an island in the Radack group is fifty-two miles long and twenty miles broad; and many others of considerable size are to be found in the vast groups abounding in the Pacific Ocean. When it is borne in mind that coral islands are formed by puny zoophytes—creatures lowest in the scale of animal life—their great extent and vast numbers are marvellous.

591. Is there any race of people where the women are never seen beyond their own villages?

One of the tribes in Algeria, the Beni M'zab, who belong to the Ibadite sect, and are the Puritans of El-Islam, have this custom, and no woman of this race of people has ever been seen beyond her own village. Among the inhabitants of Tibet, in Central Asia, the men are nomadic or wanderers, but the women live a settled life in villages. Some men remain for the protection of the property, and this is connected with a peculiar custom. The Tibetans practise polygamy, but not of the sort distinguished as polygyny, or having many wives, but of the kind named polyandry, or having many husbands. A woman is married to all the brothers of a family. When the eldest is at home, she always belongs to him; but at other times she belongs to the one who remains at home, or to either of the others. They plead in defence that their nomadic life will not afford to support a wife for each brother.

592. Where is there a town built in a volcano?

The City of Baku, on the western coast of the Caspian Sea, named by the natives "the Town of Fire," is situated in the very midst of a volcano. Its site rests on naphtha, and it is the greatest centre and source of petroleum in the Old World, rivalling the oil-springs of Kentucky or Pennsylvania, in the United States. The oil-springs at Baku began to yield in 1863, and in twenty-seven years yielded over five thousand millions of gallons of petroleum, the value of

which at pit was twenty-six millions sterling. That portion of Russia is compared to a sponge plunged in mineral oil. The soil is continually giving forth the liquid lava, either in the form of mud volcanoes or of natural springs. These springs overflow in streams so abundantly that it is hopeless to store their contents for want of reservoirs; so that the oil is much wasted. Often it catches fire and burns for weeks. The air, too, impregnated with naphtha vapour, when the oil is thus vomited forth, is then aglow all round Baku. The oil merchants, Nobel Brothers, who are said to own fifty of these wells, plugged down several as not required for the present; but one of them suddenly spouted thirty million gallons to the surface; and not long ago, the great Droobja fountain there rose to the height of 300ft., and ejected oil at the rate of some thousands of tons a day.

593. Where does the legal age of an individual date from baptism?

In Hungary, the legal age of an individual is reckoned to date only from baptism, no matter at what period of life that takes place. In 1892 a woman was arrested at Presburg, in Hungary, charged with receiving stolen goods. She pleaded infancy, and that she could not consequently be held answerable by Hungarian law for what she had done. After adjournment for serious cogitation on the point, the learned tribunal declared the defence to be a good one, and that the prisoner, a woman of forty, was legally only six months old, thus giving her a score of years to turn to dishonest account with impunity. In Japan, age is legally counted from the first day of January following birth.

594. Which birds are the best dancers?

The best dancer is the Jacana. This bird, a large rail, with very long toes and beautiful greenish-gold feathers under the wings, stops feeding every little while, rushes to one spot, to the number of six or a dozen, and then all move about in a cluster with wings raised. The Ypecaha, a true rail, does the same, and prepares smooth places beforehand for the dances. These birds make their own music, screaming loudly whilst engaged in the dance, and evidently taking the utmost delight in this form of amusement. Cockatoos have been trained to dance to the tune of "The Man that Broke the Bank at Monte Carlo." In Northern America large numbers of the grouse species meet every morning during the breeding season on a selected level spot, and here they run round and round in a circle of about 15ft. or 20ft.

in diameter, so that the ground is worn quite bare like a fairy ring. In these "partridge dances," as they are called by the hunters, the birds assume the strangest attitudes, and run round, some to the right and some to the left.

595. What is the longest time a dog has been owned by the same master?

Twenty-one years, according to an American gentleman resident in Montana, U.S. This gentleman stated recently that he was about to sail for America on his way home, so as to be present at the twenty-first birthday of his bull-terrier, which had been in his possession from the day of its birth. Mr. David Morris, of Portmadoc, Carnarvonshire, had a dog, Pero, which had been his companion for eighteen years up to 1886. Pero took a keen interest in his master's amusements, especially cricket, proving himself a capital fielder. A publican at Woolwich has owned a dog for sixteen years, which is now quite blind, and yet is on the look-out every Tuesday for a tobacconist's van, the man in charge of which has for some years been in the habit of giving the dog a sponge-cake. Samuel Trevithnan, of Padstow, Cornwall, carpenter, died in 1729, having by his will bequeathed one shilling and sixpence a week for keeping and well-treating his old dog, that had been his companion for fifteen years. In 1863, Pincher, a terrier of the old English breed, died at Water Eaton, near Oxford, aged thirty-six, an age so unusual among dogs, that it would be incredible if not authenticated. He was bred by Viscount Chetwynd, when resident at Bicester, and kept by him for many years, until, indeed, he was domesticated at a Mr. Hall's, at Water Eaton.

596. What is the highest price ever paid for a wooden leg?

Several thousands of pounds were paid for the wooden leg provided by the Sultan of Turkey for one of the first favorites of his harem. Having lost her leg in an accident, the Sultan had an artificial one of wood made for her, and by his directions it was set with rare and costly jewels to the value of many thousands of pounds. When released from its position each night, this jewelled limb is guarded with great care, and restored to its fair owner when she rises in the morning. The Marquis of Anglesea, who lost a leg at Waterloo, had an artificial one made which cost £80. It was so real in appearance and was so adroitly managed that he rode on horseback and danced at balls with almost as much ease as if the leg had consisted of real flesh and blood. The best artificial leg (unjewelled) at the

present day costs from £15 to £20, apart from any very special ornamentation.

597. How many open-air pulpits are there in this country?

Ten. The most famous one in this country is the pulpit at Magdalen College, Oxford. It dates from A.D. 1480, and is of stone. An annual sermon was formerly delivered from it on St. John the Baptist's Day to a congregation assembled in the quadrangle, the ground being strewn with rushes and grass, and the buildings dressed with green boughs, in commemoration of the preaching of the Baptist in the wilderness. The custom fell into disuse about 1750. An open-air pulpit was erected at St. Mary's, Whitechapel, Parish Church, for outdoor preaching. Another is found in the parish of Holy Trinity, Marylebone. This pulpit, which was dedicated in June, 1893, is made of white stone, with an oaken sounding-board. During an outdoor service seats are placed on the flags just beneath the pulpit, but most of the congregation stand, filling up the space inside the great iron railings. There is a rock pulpit at Eyam, in Derbyshire, from which the rector, the Rev. William Mompesson, preached during the visit of the plague. There is another pulpit-rock at Bonchurch, in the Isle of Wight, which is surmounted by a large cross. At the Church of Notre Dame at St. Lo, in Normandy, there is an outdoor pulpit; and there is one at St. Dié, in France, in the cloisters.

598. Has a marriage ever been celebrated on a grave?

In connection with the cholera visitation the following story comes from Galicia: At Delatyn, one of the places where the disease was first ascertained, a rabbi told the Jews of the district that if a loving couple could be found to consent to be married on the grave of a person who had died of the cholera, the Jews might, after this symbolic act, be spared. The well-to-do people collected money, and an orphan youth and an orphan girl were found who, on receiving enough money to establish them in a small house, consented to the extraordinary ceremony. In readiness for the wedding a canopy was put over a fresh grave, and all the congregation assembled to witness the marriage, which was performed according to the Jewish Ritual. The next morning, a man who had been foremost in the affair fell ill and died of cholera after a few hours' illness. On the 15th June, 1892, Colonel Hendrik Stamp was married to a daughter of the late General Hammond, in the cemetery at Baltimore, where the bride's mother is buried as well as her father. The Colonel stood on

the grave of his dead father-in-law, whilst the bride stood on the grave of her mother.

599. Has a castle in the air ever actually been built?

A castle in the air was spoken of as the attraction of the Antwerp Exhibition of 1894. The castle was to be of a substantial character, suspended above the earth from a huge captive balloon, built in six separate compartments, somewhat after the fashion of water-tight compartments in ships. M. Tobiansky, the inventor, states that the structure could resist the onslaught of the fiercest hurricane. Visitors were to be hauled up to the castle—the façade of which, according to a coloured representation, is not unlike that of the Alexandra Palace at Muswell Hill—by two lifts, which will glide along vertical cables. In case of need, says the inventor, the structure could be lowered to the ground by the combined action of nineteen steam cranes in from twenty minutes to half an hour. The balloon from which it was hung could be shaped so as to offer a pointed end towards the wind usually prevailing in Antwerp—that is, towards the north-west. It was proposed to light the building with 5,000 Edison electric lamps, and as the balloon ropes and cables would not be visible at night, it would then appear suspended by an invisible agency.

600. Which living danseuse is most highly remunerated?

Miss Löie Fuller, who, for the week ending the 22nd of July, 1893, received for her six days' dancing a cheque for £495, or at the rate of £25,740 a year. Her services for the £495 were a dancing turn at the Shaftesbury and another at the Gaiety, each lasting less than ten minutes. Two or three hours at that rate would give her a princely income, and soon transform her into a millionaire. Lottie Collins at the height of the "Ta-ra-ra" boom got £80 a week for a single turn at the Gaiety. Mlle. Vanoni, a clever dancer at the Alhambra, some years ago received £100 a week. Marie Taglioni, the most celebrated dancer of this century, had a six years' engagement at £1,200 a year.

601. What is the age of the youngest inventor on record?

The youngest inventor on record is Donald Murray Murphy, of St. John's, New Brunswick, who at six years of age obtained patent rights in Canada and the United States for the invention of a sounding toy. Mabel Howard, of Washington, at eleven years invented an ingenious game for her invalid brother, and got a patent for it. Albert G. Smith, of Illinois, at twelve years patented a rowing apparatus. George E.

Ohnstead, of Brookwaysville, Pa., a boy just out of knee-breeches, obtained £8,000 on selling his patented invention of a fire-escape. Humphrey Porter, a boy fourteen years of age, was the inventor of a most important improvement on the Newcomen steam engine. He hit upon the idea of connecting two cocks with the moving beam of the engine by means of strings attached to the levers, which opened and shut them. This device not only made the engine automatic, but increased its speed from six to fifteen strokes a minute. The famous Colt revolver was invented by Samuel Colt at the age of fifteen. When only seventeen years old, Benjamin F. Hamilton, of Boston, took out patents on a number of devices for electric and elevated railways. Sumner Kerr, a youth of eighteen, has patented a self-feeding pen. At the age of seventeen, that prince of inventors, Thomas A. Edison, in 1864, obtained a patent for one of the first of his inventions in telegraphy, an automatic repeater. He is now a millionaire, and has over 26,000 men in his employ in various parts of the world. He commenced life as a newspaper boy, and in 1889 had taken out his 500th patent. The designer of the yacht *Valkyrie*, Mr. G. L. Watson, of Glasgow, at the age of ten invented a water velocipede.

602. Which is the most destructive engine of warfare?

The reply to this question naturally divides itself into weapons which have been tried in actual warfare, and those whose powers have only been tested by experiment. Of the former the distinction would be about equally divided between the torpedo and the machine-gun. In the Chilian war the *Blanca Encalada*, struck by one torpedo, went down in a few minutes with 400 men on board. The same war proved that no living creature can remain in an exposed position within the range of machine-gun fire for more than a few minutes, and this conclusion is accepted by all authorities. In the second category the palm must be given to M. Turpin's new "war machine," which is a light calibre machine-gun, manipulated by four men and drawn on a carriage by two horses. It will project a hail of 25,000 missiles every fifteen seconds, at a range of nearly three miles, over a space measuring 160yds. each way.

603. What is the longest race on stilts ever run?

One which took place in the early part of 1893, from Bordeaux to Biarritz, in France, and back, a distance of 303 miles. The entries for the race were eighty-one, and the cavalcade on stilts was accompanied by a number of bicyclists,

who followed in the wake to insure fair play. Among the racers was a man who claimed to have travelled on stilts from Moscow to Paris, a distance of 1,784 miles. Another stilt-race occurred at Bordeaux in June, 1893, in which Aimée Martin, a young man under twenty years of age, beat all previous records by accomplishing 275 miles in seventy-six hours thirty-five minutes. His stilts were 6ft. long, and each step was nearly 4ft. The stilts weighed over 16lb. The shepherds on the shores of the Bay of Biscay are accustomed to use stilts 5ft. high in order to cross the marshes and dykes of the Landes. They generally travel at the rate of six or seven miles an hour. A stilt-race between women recently took place in France. The winner was Margaret Payol, thirty-six years of age. She carried a basket laden with 45lb. of merchandise, and the course was nine kilomètres, or about five miles and five-eighths. This was covered in one hour and five minutes.

604. What is the weight of the largest lobster ever caught?

Twenty-three pounds. One of that weight was caught in September, 1885, by Mr. J. D. Barnes, Zoologist of the Central Park, New York. Usually the lobster weighs from 1lb. to 8lb. or 9lb., though in Canada they are more or less frequently caught weighing as much as 18lb. or 20lb. Another lobster of the same weight, 23lb., and measuring more than 3ft. in length, was caught in 1891 at Moose Point, near Belfast, in Maine, U.S.A. The largest lobster caught in Europe weighed 12lb. A fish salesman at the Great Metropolitan Fish Market recently stated that he sold 15,000 lobsters every morning from the 1st of October to the 1st of April.

605. What is the smallest craft in which the English Channel has been crossed?

A miniature boat named the *Midge*, in which Lieutenant H. R. Sayce, of Bristol, crossed the Channel on Saturday, the 17th June, 1893. Its weight is under 35lb., and its length 8½ft., with only a 32in. beam. It is covered with canvas, leaving just room enough for a person's body to come through, and it is inflated with air by means of tubing, so as to render it unsinkable. The boat was fitted with a little foresail and a still smaller mizzen. Lieutenant Sayce was provided with a double paddle, which he kept in constant use. The voyage of the little craft from Dover to Boulogne Harbour occupied fourteen hours. One of the most novel boats that ever crossed the Channel was one made by Mr. Terry, who formed a boat on the framework of a

tricycle, and on it went from London to Dover, then across the Channel to Calais, and proceeded to Paris. The *Octoroon* (16ft. long, 23in. broad) crossed the Channel from Boulogne to Dover in eleven hours on August 19th, 1867. On August 19th, 1878, Mr. Fowler crossed from Boulogne to Sandgate standing in an india-rubber twin canoe (the *Podoscaphe*) in twelve hours. On April 5th, 1875, Captain Boyton nearly crossed the Channel in his life-preserving dress of india-rubber, but was stopped by the French pilot.

606. Has a dance ever taken place in one county to music played in another?

This has occurred at the Flying Bull, a licensed public-house, situated on the borders of two parishes and two counties. The house is built partly in the parish of Rogate, in the county of Sussex, and partly in the parish of Liss, in the county of Hants; and when a dance takes place at the Flying Bull, the musical performers play in Sussex, while the dancers trip it in Hampshire. Some time ago a party in Morris County danced to music played in New York, a distance of between twenty and thirty miles. This feat was accomplished by the guests of Mr. A. S. Hibbard, at his residence at Morristown, Morris County, New Jersey. Mr. Hibbard's private telephone line was connected with the circuit running to Madison Square Gardens, New York, and the music was heard quite distinctly. About the same time a musical and vocal entertainment was given from New York to a very large audience assembled at the Grand Union Hotel, Saratoga—a distance of 180 miles. The orchestral music was listened to at Saratoga by means of sets of hand telephones, and every note was heard distinctly, even to the applause of the audience gathered at Madison Square.

607. In what theatre do the actors receive pensions on retirement?

The actors of the Comédie Française are in that fortunate position, and receive a pension of £200 a year on retirement after twenty years of service. When an actor has become one of the company, first as a pensionnaire, and subsequently by election of the committee, confirmed by the Minister of Fine Arts, as a sociétaire, or shareholder, with first a quarter and gradually increasing to a full share, his position is assured. He receives a fixed salary of 12,000f. a year, besides his fees, which are 10f. for every evening performance, and 5f. for every matinée performance. At the end of the year, when everything has been paid, the balance is

divided amongst the sociétaires in proportion to their holdings, but only half what each is entitled to is handed to him. The other half is put by each year, and handed over when he leaves the theatre, or at the end of the twenty years of service to which he became engaged on becoming a sociétaire. Sometimes the sum that remains over at the end of the year to be divided amongst the sociétaires is a considerable one. Thus, at the end of the Exhibition year, there was 40,000fr. for each full shareholder, each of whom received 20,000fr., and was credited with a like sum against the conclusion of his service. On leaving they become entitled to a pension of £200 a year.

608. Was there ever a poet-laureate of any of the British Isles who could neither read nor write?

This was the case with Robert Maybe, of the Scilly Isles, who died some three years ago at the age of eighty-two, and was known as the poet-laureate of Scilly. His poetical accomplishments were but mediocre. Although neither able to read nor write, he composed a good deal of poetry by dictating it. He had a remarkable memory. If a book were read to him two or three times, he could repeat nearly the whole of it without assistance. The merest outline of an incident would draw from him a set of verses, which he sold in broadsheet form at a penny each.

609. What people are the most wonderful swimmers in the world?

The natives of the Sandwich Islands take first rank in this respect. They are almost amphibious, living quite as much in the water as on the land, and are adepts at swimming and playing in the water almost from babyhood. Lady Brassey has described their wonderful swimming powers. She says: "All the kings and chiefs have been special adepts in the invigorating pastime of surf-swimming, and all the present king's sisters are considered first-rate hands at it. The performers begin by swimming out into the bay, and diving under the huge Pacific rollers, pushing their surf-boards—flat pieces of wood, about 4ft. long by 2ft. wide, pointed at each end—edgewise before them. For the return journey, they select a long wave; and then, either sitting, kneeling, or standing on their boards, rush in shorewards with the speed of a racehorse, on the curling crest, enveloped in foam and spray, and holding on, as it were, by the milk-white manes of their furious coursers." This is a most enjoyable amusement, but only those who have tried it know that its performance is only possible to expert and

fearless swimmers. The majority of the children in the Sandwich Islands are expert swimmers before they are able to walk.

610. In what part of the world is it considered a sin to look upon a human face?

In the Wyoming Territory in the United States there is a colony of one hundred and thirty souls, in the Cheyenne Reservation, who deem it a mortal sin to look upon the face of any human being. Both men and women wear masks day and night, and never by any chance do they gaze upon the faces of one another. They teach morality in the severest manner, not permitting the two sexes even to dwell in the same valley. This custom is also observed in the islands of New Britain, where a man must not only not speak to his mother-in-law, but it is considered sinful for the son-in-law or mother-in-law to look each other in the face. If by any chance the son-in-law meets the lady in question, he must hide himself or cover his face. Suicide of both parties is the outcome if this rule is broken. The White and Silent Nuns, known as Bernardines, a religious sisterhood at Bayonne, in the south-west corner of France, close to the Pyrenees, founded by L'Abbé Cestac, hold no converse with human beings. Within the Buddhist monasteries there are frequently ascetics who for years together have no intercourse with the outside world, but sit in constant silent meditation, receiving their food through a hole in the door. Hermits in China tear out their eyes, with the idea that by closing the two gates of love they open the gates of wisdom.

611. When was the most dreadful storm ever experienced in this country?

The most dreadful storm ever experienced in this country, known as the "Great Storm," occurred on the night between November 26th and 27th, in the year 1703. The devastation which it caused was immense. The loss sustained in London alone was calculated at two millions sterling. The number of persons drowned in the floods of the Severn and Thames, and lost on the coast of Holland, and in ships blown from their anchors and never heard of afterwards, is thought to have been about 8,000. Twelve British men-of-war, with more than 1,800 men on board, were lost within sight of our shores. Trees were blown up by their roots to the number of 1,700 in Kent alone. The Eddystone Lighthouse was destroyed, and in it the ingenious contriver, Henry Winstanley, and the persons who were with him. Multitudes of cattle were lost; in one

level 15,000 sheep being drowned. Among other vessels in our Royal Navy that we lost were the *Stirling Castle*, with seventy guns, and the *Mary*, with the same number; the *Northumberland* on Goodwin Sands, the *Vanguard*, which sank at Chatham, and the *Yorke*, lost near Harwich, each with seventy guns, only four men escaping from the last; the *Resolution*, with sixty guns, on the Sussex coast; the *Newcastle*, with sixty guns, off Spithead, 193 being drowned; and the *Reserve*, with sixty guns, off Yarmouth, when 170 perished.

612. Has machinery ever been driven by "mouse" power?

A gentleman in Scotland has trained a couple of mice, and invented machinery for enabling them to spin yarn. The work is done on the treadmill principle. It is so constructed that the common house mouse is enabled to make atonement to society for past offences by twisting and reeling from 100 to 120 threads a day. To complete it the little pedestrian has to run 10½ miles. This journey it performs every day with ease. An ordinary mouse weighs only ½oz. A halfpenny worth of oatmeal at 1s. 3d. the peck serves one of these treadmill culprits for the long period of five weeks. In that time it makes 110 threads per day, being an average of 3,850 threads of 55in., which is nearly nine lengths of the reel. A penny is paid to women for every cut in the ordinary way. At this rate a mouse earns 9d. every five weeks, which is one farthing per day, or 7s. 6d. per annum. Take 6d. off for board, and 1s. for machinery, there will arise 6s. clear profit from every mouse yearly. The mouse employer is going to make application for the lease of an old empty house, the dimensions of which are 100ft. by 50ft. and 50ft. in height, which, at a moderate calculation, will hold 10,000 mouse mills, sufficient room being left for keepers and some hundreds of spectators. Allowing £200 for rent and task-masters, £10,000 to erect machinery, and £500 for the interest, there will be left a balance of £2,300 per annum.

613. What are the nearest approaches ever made in mechanics to perpetual motion?

An inventor has patented a double electric battery which seems to come exceedingly near to perpetual motion. Instead of using the zinc battery, he professes to have hit upon a solution which makes a battery seven times as powerful as the zinc battery, with absolutely no waste of material. The power of the battery grows gradually less in a few hours of use, but returns to its original unit when allowed to rest a few hours. He has two batteries so arranged that the power is shifted from one to the other every three

hours. A little machine has been running for some years in the Patent Office at New York. Certain parts of the mechanism are constructed of different expansive capacities, and the machine is worked by the expansion and contraction of these under the usual variations of temperature. In the Bodleian Library at Oxford there is an apparatus which has chimed two little bells continuously for forty years, by the energy of an apparently inexhaustible "dry-pile" of very low electrical energy. A church clock in Brussels is wound up by atmospheric expansion induced by the heat of the sun. As long as the sun shines this clock will go till its works wear out. Mr. D. L. Goff, a wealthy American, has in his hall an old-fashioned clock, which, so long as the house is occupied, never runs down. Whenever the front door is opened or closed, the winding arrangements of the clock, which are connected with the door by a rod with gearing attachments, are given a turn, so that the persons leaving and entering the house keep the clock constantly wound up.

614. Who has made the greatest number of successive bull's-eyes with a rifle?

The American shot, Lieutenant Partello, who is at present located at Toledo, and who recently broke all previous records with the rifle by making eighty-nine bull's-eyes in succession. The following are records at Wimbledon and Bisley: In shooting for the Elcho Shield, fifteen shots each at 800, 900, and 1,000 yards, Mr. Smith for Ireland, in 1887, made fifteen bull's-eyes at 800 yards. At the 1889 meeting, Mr. Ganley, Ireland, made eighteen bull's-eyes in succession, the last two at 800, fifteen at 900, and the first shot at 1,000 yards. Captain Lamb, England, made fifteen bull's-eyes at 800 yards, in two competitions. Captain Milner, Ireland, made eighteen bull's-eyes; his four last shots at 800, and the other fourteen at 900 yards. In 1890 Captain Barnett made twenty bull's-eyes; fifteen at 800 and the next five shots at 900 yards. Captain Fremantle and Lieutenant Oxley, in 1891, at Bisley, while shooting for England in the Elcho Challenge Shield competition, each scored fifteen consecutive bull's-eyes. Mr. Love, firing for Scotland in the same shooting competition, scored fifteen consecutive bull's-eyes; while Captains Foulkes and Gibbs each scored fourteen.

615. Has a boy of six ever grown a beard like a man?

In 1729 the Academy of Sciences in France reported a remarkable case of a boy, born in the hamlet of Bousanquet, in the diocese of Alais, who was noted from his birth for his

extraordinary growth. At the age of five years he measured 4ft. 3in.; some months after, he was 4ft. 11in.; and at six, 5ft., and bulky in proportion. His growth was so rapid, that every month his clothes required to be made longer and wider; and, what was still very extraordinary in his growth, it was not preceded by any sickness, nor accompanied with any pain. At the age of five years his voice changed, his beard began to appear, and at six he had as much as a man of thirty. At the age of five years he could carry to a good distance three measures of rye, weighing 84lb.; when turned six he could lift up easily on his shoulders and carry loads of 150lb. weight a good way off: and these exercises were exhibited by him as often as the curious engaged him thereto by some liberality. Such beginnings made people think that he would soon shoot up into a giant. A mountebank was already soliciting his parents for him, flattering them with hopes of putting him in a way of making a great fortune. But all these hopes suddenly vanished: his legs became crooked, his body shrunk, his strength diminished, his voice grew sensibly weaker, and he at last sunk into a state of total imbecility.

616. Is there any community where a single policy of insurance covers all the buildings?

This is the practice of the communal authorities of some of the villages in Switzerland, who, instead of treating insurance against fire as a concern for each householder's individual providence and thrift, insure all the buildings--the church, houses, stables, and sheds—within the parish. A community living in wooden houses, where the burning of one house often involves the conflagration of more than half the village, naturally appreciates the wise economy of such a practice. The cost is met by a slight increase in the local self-taxation. One single policy is drawn out for the whole place, which diminishes appreciably the cost of the insurance. This is one of those things which might possibly be adopted with advantage in this country now that the village or parish councils have come into operation.

617. Which English divine wrote a book in favour of polygamy?

The Rev. Martin Madan wrote a book called "Thelyphthora; or, a Treatise on Female Ruin, Considered on the Basis of Divine Law." He was born in 1726, and was chaplain to the Lock Hospital. His brother, Spencer Madan, was successively Bishop of Bristol and Peterborough, and died in 1813. In his work the author justified polygamy, taking his stand on the Mosaic law, and elaborately arguing that it is in accordance

with Christianity properly understood. When the book was published it raised a storm of indignation, criticism, and opposition. Madan consequently resigned his chaplaincy of the Lock Hospital, and retired into private life at Epsom. He died on May 2. 1790, at the age of sixty-four, and was buried at Kensington.

618. Is it possible to speak without a tongue?

Professor Huxley answers this question in the affirmative. Persons suffering from cancer frequently lose their tongues, and discover that they can not only talk as well as formerly, but also that their sense of taste is not impaired. The letters d and t are the only ones which, as a rule, those deprived of their tongue find any difficulty in pronouncing properly, and such letters are frequently turned into f's, p's, v's, or th's. Many instances are on record of the speaking powers of tongueless persons. In 484 A.D. sixty Christian confessors had their tongues cut out by order of Hunneric, but in a short time some of them went out preaching again. Pope Leo III. is said to have suffered similar mutilation, and to have regained his speech. Sir John Malcolm tells of one, Zal Khan, who had his tongue cut out, and who recovered his speech enough to tell the tale to his physician. Margaret Cutting was examined before the Royal Society of England in 1742. She had not a vestige of tongue remaining, and yet "discoursed as fluently and as well as others." The tongue actually appears unnecessary to the development of speech. Jussien relates the case of a girl born without a tongue, and yet at fifteen years of age no one could have told that she had not got one. There is at present living in Ilford, Essex, a man over seventy years of age who had his tongue taken out twelve years ago. His sense of taste is as keen as ever, and he can talk and sing quite distinctly.

619. Which volcano has the widest crater?

Haleakala, or House of the Sun, in the Island of Maui, one of the Sandwich Islands in the Pacific Ocean, has a wider crater than any other volcano in the world. The crater of Haleakala is between six and a half and seven miles in width, nearly thirty miles in circumference, between two and three thousand feet in depth, and is 10,032ft. above sea level. These islands are all of volcanic origin, and contain some of the largest volcanoes in the world, among which may be mentioned, in addition to Haleakala, Mawna-Kea, Mawna-Loa, and the far-famed Kilanea, the crater of which has an average width of about two miles. One of the curious features of Kilanea is that no dust is projected from its eruptions, nothing but lava, and much of that in a filamentous condition, so delicate

as to perfectly resemble brown human hair. The natives call this hair-like lava "Pele's Hair"—Pele being the name of the goddess of the mountain. According to Mr. Dana, these volcanoes sometimes throw out successive streams of lava two miles in breadth and twenty-six in length.

620. Which eldest sons of baronets can command knighthood at the hands of the Sovereign?

In 1612 a dispute for precedency between baronets and the younger sons of viscounts and barons was decided by the King in favour of the latter; and it was at the same time directed that baronets might bear in their shield of arms the arms of Ulster—the bloody hand. In the same year the King knighted the heirs of the existing baronets, and ordained that the eldest sons of baronets might in future claim knighthood on attaining majority, a provision also set in the earlier patents, which, after falling into disuse, was recognised in three instances—in 1824, 1827, and 1835—but disallowed in the case of the eldest son of Sir James Brown, a Nova Scotia baronet, in 1836. The title or prefix of "Sir" is granted them by a clause in their patents. It is, however, less popularly known that the wives of knights and baronets have no legal right to the title of "Lady," but have the legal designation of "Dame." There is a story told that on a particular occasion the wife of a certain knight was presented to the deaf old Princess Amelia, who, believing her to be the wife of a peer, was about to bestow on her the privilege of a Royal kiss, but the Gentleman Usher-in-Waiting, horrified at this violation of etiquette, called out: "Don't kiss her, your Royal Highness; don't kiss—she is not a real lady!"

621. Where is the largest holly tree in Great Britain?

Within ten paces of the house of Colonel Lloyd-Verney, at Clochfaen, Llanidloes. In January, 1836, the tree "measured in circumference above the roots thereof 27ft. 6in., and estimated to be 60ft. in height, and is very branchy, and the general opinion is that it is 400 years old." The circumference of the tree now is 30ft., and its height 43ft., and it has sixteen main branches varying in circumference from 8ft. 2in. to 11ft. 7in. It covers a circle the diameter of which is 54ft., and its branches have numerous initials and dates cut on them, ranging from 1700 to 1864. The most legible is that of J. Broughton, 22 Aug., 1756, which is almost as clear as the day on which it was cut. Many of the branches are half eaten through with rot, and are supported by iron rods. The tree still shows great vitality, each year bringing forth numerous

young shoots. On the opposite side of the valley is another large holly tree, which measures 17ft. in circumference. The holly hedges at Tynninghame, in East Lothian, are from 10ft. to 25ft. in height, and from 9ft. to 13ft. at the base.

622. What is the highest price ever paid for a clock?

Eight hundred and forty thousand francs, or about £33,600, which was the price paid by a member of the Rothschild family for the identical clock which had been manufactured by the Royal hands of the unfortunate Louis XVI. in the days when he was actively and congenially employed in the workshop provided for his private use and enjoyment. The clock, which stands 14ft. in height, had been a wedding gift from a foreign prince to a former Countess Fitzwilliam. Queen Victoria sent a gold clock to Kuang Hsü, the present Emperor of China, to be received by him on the occasion of his twentieth birthday, which occurred August 15th, 1891. It was accompanied by a letter wishing him a prosperous reign. The value of the clock was estimated at £1,500. An extraordinary clock, composed entirely of silver, and weighing 600lb., whose material alone was therefore worth £1,980, was in the year 1890 placed by the late Czar of Russia in the Cathedral of Borki, in memory of the narrow escape of the Imperial family in a terrible railway accident. Upon each anniversary of this escape the clock chimes a merry peal.

623. Which tree bears the largest leaves?

The palm family bears larger leaves than any other tree. The Inaja palm, growing on the banks of the Amazon, has leaves which reach from 30ft. to 50ft. in length and 10ft. to 12ft. in breadth. Specimens of the leaves of the talepot palm, a native of Ceylon, have been met with 20ft. long and 18ft. broad. These leaves are used by the natives to make tents, and, thus employed, they make very efficient shelters from rain. The leaves of the double cocoanut palm are often 30ft. long and several wide. The leaves of the cannibal tree of Australia resemble broad planks, and are frequently 15ft. long, 20in. broad, and 1½ft. thick at the base. These board-like leaves all shoot out at the top, and hang down so as to form a sort of umbrella around the stem. The umbrella tree of Ceylon has leaves of such enormous size that a single one will cover from fifteen to twenty men, and often serves as a canopy to a boat, or a tent for soldiers. A specimen leaf brought to England measured 36ft. round. The largest-leaved plant in this country is the Victoria Regia. One of the specimens of this magnificent water-lily in the gardens of the Royal Botanic Society had a leaf 7ft. in diameter, and capable of supporting a weight of 400lb.

624. Which bird is the best foreteller of the weather?

The crow as a weather prophet is entitled to the highest distinction. When rain is approaching a whole community will rise from their nests or perches, wheel about for some time, and then return to their haunts. Weather watchers state that there is a remarkable correspondence between the length of time spent in these aerial evolutions and the duration of the disturbance when it comes. When the birds remain unusually long on the wing, and indulge in loud clamour, the ensuing shower or tempest will not only be the longer delayed, but will be one of greater proportions and duration than ordinary. The peacock indulges in shrill screams when wet weather is approaching. High-flying swallows are a sign of fair weather, and when their insect-prey flies low, and the pursuing swallow skims over the surface of the earth, wet weather is foretold. Rooks and gulls and other far-flying birds do not venture far from home when heavy weather is approaching. In the English Channel the fishermen regard the curlew on dark nights as the certain precursor of an east wind. An appearance of the sea-mew promises rain and high south-west winds. Seagulls in the field mean a storm from the south-east.

625. Have bids at an auction ever been made by telephone?

During the summer of 1893, bids were made at the auction rooms of Messrs. Thomas Whitehead and Sons by means of telephone. Mr. Whitehead was submitting to auction, for the executors of a deceased gentleman named Lott, thirty £10 shares in the Albion Building Society. The bidding had reached £3 10s. per share when, as the result of an inquiry by telephone, the bidding was continued between the gentleman who made the last bid and the telephonist, and the lot was eventually knocked down to the latter for £5 7s. 6d. a share.

626. In what church in England in recent times was there dancing every year?

On May Day, each year, this is, or was until quite recently, the case in the parish church of Musgrave, in Westmorland, in connection with the custom of rush-bearing. Twelve young maidens of Brough, approved by the vicar, assemble on the first of May, at 10 o'clock in the morning, at the foot of Brough Bridge, their white dresses decorated with flowers, and a garland on their heads in the shape of a crown, formed of rushes, with flowers entwined on the outside, and a bunch of blue ribbons on the top. Accompanied by a band,

the maidens proceed through the fields to Musgrave, about a mile distant, the band playing and the rush-bearers dancing. The rush-bearers are led up the north aisle of the church, and they hang up their garlands on the side of the church, there to remain till the next year. The Gospel is read by the clergyman and some prayers offered and psalms sung; after which the clerk and vicar retire. A space is then cleared near the altar, and a fiddle produced, when dancing commences, and continues until three or four o'clock in the afternoon.

627. Which bowler ran out both batsmen at the same time?

This remarkable feat has, according to cricketing annals, only been performed on two occasions. In 1853, W. Caffyn, who was not only a batsman but one of the best bowlers in England, playing for the All England Eleven against twenty-two of Ipswich, threw in a ball from long-off which passed through the stumps and dislodged the bails at the bowler's end, and then travelled to the other wicket, passing through the stumps and dislodging those bails also. Mr. Maurice Read describes how it was done on another occasion in Australia by the famous Yorkshire bowler, Ulyett, who persuaded two batsmen that they were both run out at the same time. "We had finished our match," says Mr. Read, "against eighteen of Ballarat, and, to oblige the spectators, six of us afterwards played twelve of Ballarat. During their innings two of the men started to run, and met near the end where Ulyett was bowling. The ball was thrown to him and he put the wicket down. One of the batsmen bolted for the other wicket, and Ulyett ran after him and caught him up just in time to put that wicket down also. Then the question arose as to which man was out. The umpires didn't seem to know, so Ulyett settled the matter by saying that both were out. They expostulated, saying that two men couldn't be out at once. 'Ah,' said Ulyett, 'you see, it's different when the same man puts both wickets down.' They admitted that this certainly made a difference, and both went out."

628. What is the greatest rise in value ever recorded in any British limited liability company's shares?

The most sensational rise in value of shares on record is in connection with the New River Company, which supplies London with water from the Chadswell springs in Hertfordshire. The company dates from the 29th September, 1613. So little was the benefit of a pure water supply appreciated or understood in those days, that for more than thirty years

the seventy-two shares (equally divided into King's and Adventurer's) netted only £5 a share. The value of the shares has now risen to between £85,200 and £122,800 per share. An entire Adventurer's share in the company was sold for the latter sum to the Prudential Assurance Company on the 17th of July, 1889. In 1891 the Trustees' and Executors' Insurance Company paid a dividend of £533 on every £10 Founder's share, of which only £3 was paid up.

629. What University has received the greatest endowment at one time?

That at Palo Alto, thirty miles from San Francisco, which was founded, in memory of his son, by the late Leland Stanford, railway contractor, senator, and millionaire, and endowed by him with 20,000,000 dollars, or about four millions sterling. Over and above the usual academic studies, telegraphy, type-setting, farming, journalism, etc., are to be taught. This University is destined, in the near future, to be one of the greatest institutions of learning in the world. The fortune with which Senator Stanford endowed it is more than the endowments of Harvard and Yale Universities put together, and as Mrs. Stanford, who survives her husband, is as deeply interested in the University as her husband was, it is not unlikely that she will add to that sum a part of the great fortune that is now hers. Victoria University, Manchester, which grew out of Owens College, owes its origin to John Owens, a Manchester cotton-spinner, who, dying in 1846, left £96,654 for the foundation of a college on an absolutely unsectarian basis. By 1851 the college was built and opened. In 1872 the Owens College Extension Fund was started, and ultimately reached £211,152. Further and rapid development was promoted by the Clifton bequest of £21,571, and the yet more princely Beyer bequest of £100,243 in 1876. The University of Oxford has an endowment fund of £280,000 per annum, and Cambridge £235,000. The total income of Oxford amounts to £414,000 and Cambridge £350,000, the balance beyond the endowments being made up of various revenues.

630. Has any athletic association in this country running races for ladies?

The Kensington Athletic Association, at their meeting in July, 1893, which took place at Grove Farm, Chiswick, had the following running races for ladies: Fifty yards ladies' race, won by Miss E. G. Robinson by 4yds.; ladies' consolation race, won by Miss Price by 3½yds.; 150yds. consolation race (ladies), won by Miss Waspe by 1¼yds. Some remarkable

walking feats have been accomplished by ladies. In 1874 Miss Richards walked at Bristol 1,000 miles in 1,000 hours; her object in exerting herself to win the prize offered for the task being, it was said, to assist her parents in pecuniary difficulties. On July 25th and following days, in 1876, Bella St. Clair walked 1,000 miles in 950 hours.

631. What is the highest price ever paid for an old playbill?

Six pounds ten shillings. Four playbills, with David Garrick's last farewell and last appearance on the stage, printed on satin, were sold for £26, or at the rate of £6 10s. each, at a sale at Sotheby's on the 22nd of July, 1893. At the same sale, one lot, including the bill of Elizabeth Farren's last appearance on the stage ("School for Scandal"), sold for £5; three others, including a very early Hampstead playbill (5th January, 1807), £5 17s. 6d.; four others, including the first and last appearances of Edmund Kean on the London stage, 1814 and 1832, £10 15s.; a series of over 100 playbills relating to Edmund Kean, 1814 to 1832, £5 5s.; five bills of the same actor's early appearances at the Haymarket in 1806, when he played parts of a few words' length, £10 5s.; twenty-two bills relating to John Philip Kemble, £6 15s.; and a series of twenty-five relating to Mrs. Siddons, five guineas.

632. What is the highest price ever paid for a Cashmere shawl?

Five hundred thousand francs, or about £20,000. This shawl was a present by King Charles X. of France, and is now in the possession of the Duchess of Northumberland. It is manufactured from the fur of a species of Persian cat. The hair of this cat's fur is so extremely fine and elastic that a single hair is scarcely perceptible to the naked eye. The spinning and weaving of this material, and the production of a single shawl like the one referred to, require a few thousands of cat-skins and the labour of several years. The Duchess of Northumberland's shawl measures eight yards square, but so fine and elastic is it that it can, if necessary, be compressed into a large coffee cup. Fine Cashmere shawls are always expensive. Mr. Baden-Powell stated that one of first-rate quality, weighing 7lb., will in the country of their manufacture cost not less than £300.

633. How many occupations have their patron saints?

No fewer than forty-two, mostly chosen because the selected saints worked, or were supposed to have in their lifetime worked, at that particular occupation, and therefore fitted

themselves to watch over, guard, and protect those engaged in it. The following list gives the names of the occupations and their respective patron saints: Armourers, St. George; artists, St. Agatha; bakers, St. Winifred; barbers, St. Louis; bookbinders, St. Louis; booksellers, St. John; brewers, St. Florian; brushmakers, St. Anthony; burglars, St. Dismas; candlemakers, St. Lucian; carpenters, St. Joseph; carpet-weavers, St. Paul; cloth-workers, St. John; divines, St. Thomas Aquinas; doctors, St. Cosme; dyers, St. Maurice; ferrymen, St. Christopher; fishermen, St. Peter; goldsmiths, St. Eloy; hatters, St. William; huntsmen, St. Hubert; lawyers, St. Yves Helori; locksmiths, St. Peter; mariners, St. Christopher; millers, St. Arnold; miners, St. Barbara; musicians, St. Cecilia; nailers, St. Cloud; netmakers, St. James; nurses, St. Agatha; painters, St. Luke; pinmakers, St. Sebastian; potters, St. Gore; shepherds, St. Windeline; shoemakers, St. Crispin; spectacle-makers, St. Fridolin; tailors, St. Goodman; tanners, St. Clement; tax-collectors, St. Matthew; tent-makers, St. Aquila; travellers, St. Raphael; wheelwrights, St. Boniface.

634. Can an intensely strong electric current be passed through the human body with safety?

This has been shown to be possible, and has, in fact, been actually done with the high tension electrical discharges with which Professor Tesla gave his demonstrations in this country in 1892. The puzzling paradox of a deadly current made quite harmless by an enormous increase of energy has now been demonstrated with numberless varieties of experiments. High frequency currents, as they are called—currents representing many thousands of volts—may be safely passed into the human body and come out at the finger-tips in a deafening roar of sparks. Hertz, Ferraris, Tesla, and others have shown that with such currents the accepted ideas with regard to electricity do not hold good, and must be modified. At the soirée of the Royal Society, Mr. A. A. Campbell Swinton repeated his feat of passing a current through the human body in order to light up a glow-lamp on the other side. He produced his alternating currents of great frequency by means of an ordinary inductive coil feeding into two Leyden jars. From these jars the spectators saw the electricity pour out in beautiful purple streams to any conductor that offered itself. By breaking the circuit between one of the jars and the glow-lamp terminal, and interposing the body of one of the spectators, the lamp glowed with somewhat reduced brilliancy, and no inconvenience was felt by the experimenter except at the

moment of closure, when a slight shock was felt. Abbé Nollet once discharged a Leyden jar through an entire regiment of 1,500 men, who all received violent shocks through the arms and shoulders.

635. What is the weight of the largest human heart on record?

Certain diseases tend considerably to increase the weight of the heart. Without material disease, Dr. Peacock records that he once saw a heart which weighed 40oz. 12dr. A recent case reports a heart weighing 18½oz., or very nearly double the average weight, which is about 9⅓oz. This was found to be the weight of the heart of Amelia Holland, aged thirty-two, who died suddenly in August. 1893, at Westcott Street, Southwark. Huxley in his "Physiology" says: "The size of the heart is usually roughly estimated as equal to that of the closed fist of the person to whom it belongs." The work done by the average human heart in a given time exceeds that accomplished by all other muscles exercised in a boat-race during the same period. Helmholz, the German physicist, proved that the heart could raise its own weight 20,280ft. in an hour, while the best locomotive engine could only raise its own weight 2,700ft. in the same time. An active climber, with the full exercise of all the needed muscles, can only accomplish 9,000ft. in nine hours, or one-twentieth the work done by the heart.

636. Which part of the United Kingdom has the most peculiar postal arrangements?

The Island of St. Kilda, in Inverness-shire, where the postal arrangements are unique. For eight or nine months of the year, the inhabitants of St. Kilda have no direct communication with the outer world. A strong sea-current runs eastward from St. Kilda and washes upon the western shores of the Hebridean Islands of Harris and North Uist. This current has hitherto done good service in carrying to the Hebrides the St. Kilda mail-boats, which are of simple construction. The boat is cut out of an ordinary plank of wood. Its length is about 2½ft. and breadth about 1ft. In depth it is 7in. to 12in. About the centre of the deck a cavity is carved out, in which is placed a tin box containing the mails. The lid of the box is securely fastened, and the box having been placed in position, the cavity is firmly closed by a board nailed over it. Near the bow, the word "Open" is carved in large letters on the deck. The bow is pierced by a round hole through which passes a stout cord, to which is attached a buoy to keep this peculiar mail-boat afloat. The little vessel is then launched, and is usually washed up on the shores of Harris or North Uist in about ten

or twelve days. When discovered, as it soon is, the cavity is opened, and the letters having been extracted from the tin box are forwarded by post to their proper destination; and it is only in this way that the inhabitants of St. Kilda can, during the winter months, communicate with the outer world. The greatest peculiarity in the English postal service is the revival of the mail coaches, with armed drivers and conductors, between Manchester and Liverpool and London and Bedford. Another peculiarity is that in some places letters for Scotland are first sent about one hundred miles southward before commencing their journey for North Britain.

637. What is the greatest number of blades ever contained in a pocket-knife?

The most remarkable knife in the world is one in the curiosity room of the factory of Joseph Rodgers and Sons, cutlers, Sheffield. It has 1,890 blades, and ten blades are added to it every tenth year, so that the addition about six years hence will bring the number of its blades up to 1,900. Another curiosity in their possession is three pairs of scissors, all of which can be covered by a thimble. One thousand eight hundred and forty blades, all provided with hinges and springs, and all closing into one handle, were made in a single pocket-knife by one of the cutlery manufacturers in Sheffield. Another specimen has 220 blades, highly ornamented with landscapes, etc.; and a third, measuring, when closed, only one inch in length, has seventy blades, illustrating all the various shapes ever given to knife blades. A knife with more than 100 blades was presented by the cutlers of Sheffield to George IV., and is now amongst the Royal plate at Windsor Castle. A carving knife and fork at New York are said to be the largest in the world, the former being 10½ft. long and the latter 7½ft. The handles, made out of elephants' tusks, are worth £160. Together these implements weigh 320lb., and are valued at £300.

638. What is the most accurate method of measuring mountains?

There are three ways of accomplishing this measurement, so far as their height is concerned, namely, by the barometer, by observation of the atmospheric pressure; by observation of the boiling point of water; and by calculation from data supplied by accurate surveying instruments, the necessary formulæ being supplied by trigonometry. This last plan, known as triangulation, is by far the most accurate method. The first method is based on the fact that the atmosphere is densest at the surface of the earth, having there

to support the weight of the whole column of air above it, and the decrease in pressure being known by the barometer enables the observer, after due allowances, according to temperature, to work out the height of the mountain. The second method of observing the boiling point of water by the thermometer is based on the well-known fact that water boils at 212deg. Fahr., at the level of the sea, or at a pressure of 30in. of mercury; and as the relation between the pressure and the boiling point is known exactly, the height can be measured in this way more or less accurately. Triangulation is the name applied to the process of calculation by measuring the angles of triangles. The angles having been measured by the theodolite, and knowing them and one side, trigonometry enables the surveyor to calculate the other two. Measuring by this method is done with wonderful correctness. Two instances of this accuracy are given in Thornton's "Physiography," one of a plain, and the other of a mountain. The length of Salisbury Plain was ascertained with a result which was less than 5in. from the measured value. The height of Ben-Macdhui was calculated to be 4,295·6ft., and this height, when checked, proved to be within 1½in.

639. What is the size of the largest photograph ever taken?

One hundred and sixty yards in length. This enormous photograph, which is claimed to be the longest ever produced, was taken by a Russian gentleman named Piassetsky. It consists of a series of views of the Transcaspian Railway, from Caspian to Samarkand. What is said to be the largest negative of a sitter ever yet produced direct from life measures 64in. by 33in., or practically life size. It was taken by Messrs. Werner and Son, of Dublin. The camera used was specially designed by Mr. A. Werner. The lens was a Ross double, the portrait being taken at a focus of 60in., with an exposure of 10sec. A photograph 20ft. in length was shown in the Indian and Colonial Exhibition held in London in 1886. This specimen of photographic skill, which represented a complete panoramic view of the City of Sydney, Port Jackson, and its suburbs, was taken from the cupola of the Garden Palace, which was subsequently destroyed by fire.

640. What is the weight of the heaviest cyclist in the world?

Twenty-seven stone, being the weight of Dr. Meldon, of Dublin, who, it is stated, would quickly weigh ten stone additional did he not keep himself comparatively thin by cycling and playing lawn tennis. Twenty-two stone is the

weight of Mr. M. A. Manning, of Waterford, Ireland, who not only has the distinction of being one of the heaviest, but also the tallest cyclist in the world. He stands 6ft. 6in. in height, and rides a solid-tired safety bicycle, specially constructed for him, and which weighs only 47lb.

641. Who owns the most valuable dinner service in the world?

Her Majesty Queen Victoria, who has a gold dinner service valued at over £800,000. At Windsor Castle there are two State dinner services—the one of gold, which will dine 150 persons; the other of silver—both of which were formed by George IV., who regarded them as his own property; but William IV. made them over to the Crown. The great silver wine-cooler made by Rundell and Bridge for George IV. weighs 7,000oz., and is inclosed with plate-glass, the silver being superbly chased and ornamented. The Royal plate at Windsor is altogether worth about £1,800,000. There are quaint pieces which were taken from the Spanish Armada; a peacock of precious stones from India, which is valued at £40,000; a tiger's head (also from India), which has a solid ingot of gold for its tongue, and crystal teeth; and a wonderful collection of splendidly-ornamented gold shields, one of which was made for George IV., out of his snuff-boxes, and is worth £10,000. There are four hundred plates, which cost 26gs. each. The Marquis of Breadalbane is the owner of a fine service of gold plate, valued at £120,000. It has been frequently sent to Perth Station for the Queen's use on her journeys to and from Scotland. Baron Rothschild owns a gold dinner service, which was recently used at a banquet given to the German Emperor. Its estimated value is £100,000. The Duke of Westminster owns the finest silver plate in the world. The plate at the Mansion House is valued at £20,000. The Duke of Cumberland probably owns the greatest quantity of plate of any individual in the world, its weight being estimated at twelve tons. Two magnificent silver dinner services that once belonged to the Sovereign of this country have found their way to foreign Courts: one to Holland on the death of William III., which was valued at £100,000, and the other of nearly equal value to Belgium, through Prince Leopold (the husband of the Princess Charlotte), who afterwards became King of Belgium.

642. Who made the thinnest sheet of iron ever produced?

One of the iron manufacturers of Swansea, who succeeded in making a sheet of iron so thin that it required at least 4,800 sheets to make one inch in thickness. Tissue paper is

1-1200th of an inch thick, while this sheet was only 1-4800th of an inch in thickness. It measured 10in., by 5½in., and weighed but 20grs., being, in fact, a sort of iron "gossamer." Many years ago there was sent to England from Pittsburg, in the United States, a letter written on a sheet made from iron, 1,000 of which laid upon each other only made one inch in thickness; the dimensions being 8in. by 5½in., and weighing 69grs. Since then Wales surpassed America, Staffordshire surpassed Wales, and then once more Wales took the lead, and at length Swansea carried off the palm by making the sheet of iron first described of the finest appearance and the thinnest that has yet been seen by mortal eyes. Visiting cards of thin iron have been made by a Belgian manufacturer, 400 to the inch; by Count Harrach, 640 to the inch; by Baron Krupp, 820 to the inch; and by Count Renard, 1,000 to the inch. Iron shavings can be cut of an immense length. Mr. W. E. Donelly produced one 107ft. long, and Mr. Birsching exhibited one 110ft. in length. Worth's Museum in New York contained one 175ft. long, and the Brush Electric Company at Cleveland turned out one measuring 237ft., which hung on the walls of the company's works unbroken for eight years. But even this record is said to have been since beaten by a steel shaving 265ft. long, produced by a New York steel firm.

643. Were hats ever taxed in this country?

Yes. By the statute 24 George III., chapter 51 (1784), it was enacted that all retailers of hats, commonly called felt or wool stuff or beaver hats, or any leather or japanned hats, should take out an annual license, the charge for which was 40s. in London and 5s. elsewhere. It was further enacted that for every hat sold by a licensed retailer there should be paid the following duties: Not exceeding 4s. in value, 3d.; above 4s. and not exceeding 7s. in value, 6d.; from 7s. to 12s. in value, 1s.; above 12s. in value, 2s. A subsequent statute, 36 George III., chapter 125 (1796), directed all hats prior to delivery to be stamped on the lining, under a penalty of £10. All hats imported were subjected by the statute 43 George III., chapter 68 (1803), to a duty of 21s. each. The taxes were all removed in 1811 and never re-imposed. Every person in 1571, in Queen Elizabeth's reign, if above seven years of age, was required to wear, on Sundays and holidays, a cap of wool, knit, made, thickened and dressed in England by some of the trade of cappers, under the forfeiture of ¾d., equal to at least 3d. now, for every day's neglect. Hats were not made in England till 1510. Silk hats were first introduced about 1820. In the smallest towns in

Germany only the sweeps wear the chimney-pot hat. The United Kingdom is the greatest hat-making country in the world, and upwards of 12,000,000 are exported annually, valued at £4,000,000 sterling.

644. Which is the oldest village band in this country?

That of Stedham, a village on the River Rother, in the district of Midhurst, in Sussex. The Stedham village band dates back as far as 1790, when Henry Bailey was its leader. In 1837 the band adopted a uniform of white trousers and caps, circled by blue bands. A little later the blue band on the caps vanished, and a red band took its place, the bandsmen thinking this made a better show. In 1872, blue tunics and trousers came into vogue, to yield in 1889 to the costume now worn, that of the Hussar, with gold lace bands on caps. The present drummer's great-grandfather played in the band nearly 100 years ago. At Bury there is a celebrated brass band (Besses-o'-th'-Barn) which has been established over a century, and its only support is the profits from a "social," to which between 300 and 400 members pay 4s. a year. There is not a single gentleman subscriber to the band. With two exceptions, all the instrumentalists work as journeymen. In 1892 they earned over £1,000 by playing at concerts. The biggest prize they ever won was £231 10s. at Belle Vue, Manchester, in the same year.

645. Has type ever been set by telegraphy?

Mr. Donald Murray, a journalist employed on the 'Sydney Morning Herald,' N.S.W., has invented a printing telegraph of a somewhat novel character. By this invention it is possible to operate at a distance, over a single telegraph wire, a typewriter, type-setting machine, piano, or any other keyboard instrument. The invention consists of a repetition of two very simple elements, namely: (1) a transmitting element (at the sending station) which, by the depression of a key, transmits a certain combination of five short positive and negative currents; (2) an interpreting element (at the receiving station), by the passage through which of a given combination of positive and negative currents a lever is released and makes electrical contact, thus energizing a particular electro-magnet which operates a certain type-key, only one interpreting element being completely unlocked by any given combination of currents. Thirty-two transmitting elements, connected in parallel, form the transmitter, and thirty-two interpreting elements form the interpreter, and these, combined with a shift-key device, a typewriter, and a battery, all suitably connected, comprise the essential features

of the machine. Another type-setting machine by telegraphy was designed in 1891 by Major Law, commercial attaché to the British Embassy at St. Petersburg. It was designed for the purposes of setting up type simultaneously in two or more stations at long distances apart. By Major Law's invention a journal, with its central office in London, could be set up simultaneously there and in provincial centres.

646. Is the heat of water increased by putting the kettle on the fire after it has once boiled?

No, water cannot be heated above its boiling point, which, with the barometer at 30in., is 212deg. Fahr., unless pressure be employed by preventing the escape of the generated steam. Boiling, or the emission of steam in bubbles, consists in the formation of a vapour of equal elasticity to that of the atmosphere, which exerts its pressure on the surface of the liquid. It therefore follows that any lessening or increasing of the pressure of the air is accompanied by a corresponding depression or elevation of the boiling point. It has been ascertained that a variation of one-tenth of an inch in the barometer produces a difference of fully a twentieth of a degree Fahrenheit in the boiling point. By confining water in an air-tight vessel, it may be heated to a temperature only limited by the strength of the vessel. Liquids in general boil from 60deg. to 140deg. lower than their ordinary boiling point when heated *in vacuo*. The attraction of a fluid for the surface of the vessel in which it is boiled has an influence on the boiling point. Water boils at 212deg. in a metallic vessel, in a glass vessel at 214deg., while in a vessel varnished inside with shellac the heat may be raised to 220deg. without ebullition taking place.

647. Who carries on the largest bookselling business in the world?

Mr. Cole, of Melbourne, who, in his book arcade in that city, keeps over a million books in stock. The shelves are crowded from floor to ceiling, and stretch away from the entrance into the far distance. People are allowed by Mr. Cole to go in and read, and spend hours in doing so on the comfortable lounges provided by him for his patrons. The greater number of those who avail themselves of this permission go away without making a single purchase. This privilege involves a certain amount of risk and loss to the bookseller, but he finds that on the whole it pays him well. Mr. Cole's first start in the book trade was with a barrow in Melbourne market, and by his industry and push he has now succeeded in establishing his colossal business.

648. Has any ready means been devised of converting sand into a firm foundation?

Such a means was recently described by its inventor, Mr. Neukirch, before the American Congress of Engineers. He converts the sand into a sort of concrete by forcing into it cement in powder through a pipe by means of air pressure. The pipe has an internal diameter of about 1½in., and is drawn to a point at the lower end, in which there are three or more holes of about ⅜in. diameter. The upper end is connected by a bend and rubber tubing with the air-pressure supply-pipe in such a manner that the pipe can be raised, lowered, and moved while the air-pressure is acting through it. In the air-pressure supply-pipe, provision is made enabling any desired quantity of cement powder to be fed into the air current. After the injection of air has ceased, the grains of sand in subsiding adhere very firmly together, and experiments have shown that a natural bed of sand, after having one-fifth of its volume of cement injected into it, will, after the operation, occupy a smaller space than before; this was shown by the fact that the surface of the sand-concrete lay deeper than that of the surrounding natural sand-bed. The cement carried by the air is retained by the moist or wet sand and forms sand-concrete, which is as firm as a rock. The introduction of the lance tube into the sand-bed is effected by first blowing air through it, so that the air issuing from the lower end forces back the sand, and in setting it in motion renders the sinking of the tube to considerable depths, such as 16ft. to 19ft., readily possible in a comparatively short space of time.

649. Which country has the most inefficient army in the world?

Corea, a kingdom on the east coast of Asia—between the Sea of Japan and the Yellow Sea—the native name of which is Chosön, or Morning Calm. The true comicality of the Corean Court and army, and the utter inefficiency of the latter, can only, says a recent traveller in that country, be discovered upon one of the occasions (now somewhat rare) when the King goes in State through the city to visit some temple or tomb. The following account of what was witnessed on one such occasion can leave no doubt that Corea exceeds every other country so far as the inefficiency of its army is concerned. From an early hour in the morning the streets were guarded by military of a species unique in the world. The infantry lined the roadway, and were for the most part lying asleep on the ground.

They had almost as many flags as men; and their muskets, examined as they stood piled together, were commonly destitute either of hammer, trigger, or plate, sometimes of all three, and were frequently held together by string, while the bayonets were bent and rusty. The cavalry were even more remarkable. These were clad in uniforms probably about 300 years old, consisting of a battered helmet with a spike, and a cuirass of black leather, studded with brass bosses and worn over a heavy jerkin of moth-eaten brocade. Enormous jack-boots completed the costume, and rendered it difficult for the men to mount their steeds, even though they were rarely more than eleven hands high. Banners of yellow, red, and green, with a tuft of pheasant feathers at the top, and stacks of arrows were carried in front of the officers, who were with difficulty supported by squires on their pyramidal saddles.

650. Who has stood godmother to the largest number of children?

The ex-Empress Eugénie, widow of Napoleon III., who stood godmother to 3,834 children. Amongst her possessions are six boxes, containing the names of these 3,834 children; they were born in France on the 16th day of March, 1856, and on the preceding day the Emperor and Empress had declared it to be their intention to stand in that relation as sponsors for all those children who should be born on the same day as the Prince Imperial. The ex-Empress was born on the 5th of May, 1826, and is, therefore, in her sixty-ninth year. Her marriage with Napoleon was celebrated with great magnificence on the 29th day of January, 1853, at Notre Dame. She now resides in this country, and is on very friendly terms with our Queen. Her only son, the Prince Imperial, entered the Woolwich Military Academy, and in 1875 completed with distinction a regular course of study. Volunteering to serve with the English Artillery in the Zulu campaign of 1879, he was killed on the 1st of June in that year, when reconnoitring, by a party of Zulus in ambush.

651. Which English Archbishop killed a man?

George Abbott, who was born at Guildford on 29th October, 1562, and became Archbishop of Canterbury. In the summer of 1621 Lord Zouch invited him to a hunting party at Bramshill Park, Hampshire. Crossbows were used in the sport, and on the 24th July, Abbott, when shooting at a buck, had the misfortune to kill one, Peter Hawkins, a gamekeeper. The man had already been warned to keep out of the huntsmen's way, and the coroner's jury returned a verdict of *per infortunium suæ propriæ culpæ.* News of the occurrence

was sent to the King, who declared that none but a fool or a knave would think the worse of a man for such an event, and that the like had often nearly happened to himself. The archbishop was greatly distressed: he prescribed for himself a monthly fast on Tuesday, the day of the misfortune, and settled £20 a year on Hawkins's widow, which, in Oldy's words, soon procured her another husband. But others would not allow the matter to be so easily passed over. At the moment four bishops-elect were awaiting consecration; one of them, John Williams, who had been nominated to the See of Lincoln, refused to be consecrated by Abbott, declaring that to receive consecration at Abbott's hands would be sacrilege. After a halting decision of a Commission, whose members were evenly divided as to the scandal caused to the Church by the homicide, it was thought fitting to grant Abbott a formal pardon or dispensation, which was duly signed by King James. Abbott's reputation, however, never quite recovered from the slur which had been cast upon it. Three of the bishops-elect later on refused to be consecrated by him, and he in deference to their views delegated the duty to the Bishop of London.

652. Who is the best lady rifle-shot in the British Isles?

Miss Leale, who is a member of the National Rifle Association, and who created a sensation by her remarkable scoring at the Bisley Meeting, in July, 1891. Miss Leale is the daughter of a race of marksmen. Her father, a marksman of high repute, is surgeon-major in the Guernsey Militia, and she has an uncle among the range officers at Bisley. A daughter of Lord Roberts is a good shot. In a ladies' shooting competition at Simla, she carried off the first prize with a score of 130 out of a possible 150, the second prize in another match, and was very near winning a third. One of the most noted shots among modern ladies is Lady Eva Quin, niece of Lord Connemara, renowned for her tiger-destroying exploits in India. She has killed six full-grown tigers. While shooting these animals, she had no protection but the howdah of her elephant, that is, the seat or couch which is placed on its back for the rider.

653. Which clock in the world has the greatest number of faces?

In a building in San Francisco which has 500 rooms there is a clock with 500 dials, one dial being for each room. The dials are operated with compressed air, which is conducted in pipes all over the building. A clock constructed by the late Beauvais M. Verité, engineer to the Northern Railway Company

and presented by him to the Bishopric of Beauvais, is a masterpiece of mechanism, being provided with fifty-two faces, marking the hour, the day, the week, the month, the year, the rising and setting of the sun, the phases of the moon, the tide, the time in the principal cities of the world, and a whole series of astronomical and terrestrial evolutions. It is composed of 92,000 pieces, which all receive their motive power from a little weight of 50 grains. The mounting is in oak wood and exquisitely carved. When the hour strikes an extraordinary movement is produced, and the whole structure seems alive. The artist wished to give an idea of the Last Judgment. A cock crows, angels sound the trumpet at the four cardinal points, and flames issue from the openings in the turrets, placed to the right and left. The Eternal Father looks round as if to judge the world. A soul advances and takes its stand before the Sovereign Arbiter. It is the soul of an impenitent sinner. Its works are found wanting, and it is condemned. A hideous demon, armed with a fork, pounces upon the unfortunate one and hurls him into the eternal abyss. Next comes the turn of the just soul. It appears before God, receives a favourable judgment, and is to be admitted into the joys of Heaven. Immediately angels make a guard of honour and escort it in triumph to the mansions above, while the air resounds with sweet music.

654. Is there any periodical which, without being issued either in print or any other kind of graphic multiplication, is read to its subscribers by telephone?

A daily telephonic journal in Buda-Pesth is read to its subscribers per telephone. A Hungarian supplies the following details regarding this remarkable periodical: "For the purposes of the telephonic editor, the city of Buda-Pesth is divided into eight sections, each section having one conducting wire. The apparatus by which the news is supplied to each house occupies a space of 5in. square, and has two tubes, so that two members of the family can get the news at once. The cost of putting it in is 35s., and each subscriber pays a rate of 2s. 6d. per month for the special newspaper service. The news collector does his work in the night, and having his budget filled, he takes his place in the central office at nine in the morning and begins to tell his story, which is given in a telegraphic style, clear, condensed, and precise. In five minutes after the first delivery the budget of news is repeated, in case some subscribers may not have heard. At ten o'clock the foreign news is given, and after eleven the doings of the Hungarian Parliament. Various items of city news are given during the day."

655. Which London roads or streets have the widest footpaths?

Two in the East-end, namely, Mile-end Road and Commercial Road East, which far surpass in the width of their footways any streets in the West-end or in any other part of London. The footpaths of these two streets are in each case almost as wide as the Strand roadway. Farringdon Street is the widest thoroughfare in the City of London; and Petherton Road, Canonbury, is the widest road in suburban London. The busiest traffic in the City of London is not found in its widest street (Farringdon Street), but at the point where so many important lines of traffic converge in Mansion House Street. So great is the traffic within the comparatively small area of the City, that the services of nearly 200 members of the City police force are devoted to the dangerous and important duty of regulating it. There are at present 53 miles of wood pavement in the Metropolis, the streets of which extend in the aggregate over 1,966 miles. The construction of the roads and streets is as follows: 537 miles of macadam, 280 of granite, 53 of wood, 13½ of asphalt, and 798 of flints or gravel. The wood pavement, as at present laid down, is 980,533 square yards, its cost being estimated at £120,000.

656. Has any magistrate in Great Britain, whilst sitting on the Bench, ever recommended suicide?

This happened at the police-court of Kirkcaldy, on Wednesday, the 4th day of October, 1893, Bailie Westwater being the magistrate presiding on the occasion. James Scott, described as a labourer, was brought up before the Bailie charged with sleeping on ground belonging to the Kirkcaldy Pottery. Scott, who was stated to have frequently been convicted of disturbances, asked to be let off and he would leave the town. The magistrate: "I will allow you to go on that condition. Certainly you are no credit to the town. If you cannot do better, I think you should just commit suicide and be done with it." Suicide is by English law a felony, so that any magistrate giving this advice south of the Tweed would lay himself open to the charge of inciting to the commission of a felony.

657. At what hour do birds go to sleep?

Many birds, probably the great majority, go to sleep within a very short time of sunset, while numbers continue to roam, and, like the nightingale, pour forth their song for hours up to near midnight. The blackcap is occasionally known to trill as late as ten o'clock on a fine evening in June; the woodlark

also frequently sings till late at night, and has on that ground been mistaken for the nightingale. The sedge-warbler keeps up a continual chirping for an hour or two after sunset. The thrush does not go to sleep in the summer evenings till half-past nine. The robin is the latest retiring bird in the United Kingdom; it may often be heard singing until midnight in the early summer, and in the winter is to be seen hopping about long after all other birds have sought repose. The cuckoo is the earliest riser in the morning, followed by the greenfinch at 1.30 a.m., the blackcap at 2.30, the quail at 3, the blackbird at 4, the robin and wren at 4.30, the thrush about 4.50, followed by the house sparrow, tomtit, and lark at a later hour.

658. Which British artist is considered to be the best portrayer of bird life?

Mr. Henry Stacy Marks, R.A., who has recently celebrated his 65th birthday, having been born on the 13th day of September, 1829. In this branch of art he is absolutely unequalled. The artist became a student at the Royal Academy at the age of twenty-two, and amongst the early pictures exhibited by him were: "St. Francis Preaching to the Birds," "Old Friends," "From Sunny Seas," and "A Select Committee." Mr. Marks painted twelve panels of birds, which were placed in Eaton Hall, the seat of the Duke of Westminster; some "Flamingoes and Storks" for Mr. Hodgson, of Audley Street; and in 1889 held an "Exhibition of Birds" in the Fine Art Society's rooms, New Bond Street, which was extremely popular. This artist also drew the designs for the interior decoration of the Gaiety Theatre, London, and the Princess's, Manchester.

659. What is the greatest yield of honey ever secured from one hive?

The largest weight of honey taken in a single season from one hive is 1,000lb. from a stock of Cyprians, belonging to Mr. B. F. Carroll, of Dresden, Texas. Large yields of honey have been obtained from the Great Cave beehive of Kentucky. This consists of a natural cave hollowed out of the solid rock, 150ft. high, and has an area of about four acres. The yearly yield amounts, on some occasions, to 700lb. or 800lb. In England nothing approaching this has ever been recorded. Yields of 1,360lb. from seven hives, or nearly 200lb. per hive, have been reported, an average that single colonies have frequently exceeded. Mr. Simmins has taken 50lb. from a single colony in seven days, and in 1886 one stock gave over 250lb., 200lb. of which was in sections. A bee farm near Becton,

Canada, of four acres, has nineteen millions of bees, which produce 75,000lb. of honey every year. The largest bee owner in the world is Mr. Harbison, of California, who has 6,000 hives, producing 200,000lb. of honey per annum, worth about £8,000. The total number of hives in Europe and the United States is 7,424,000, and the annual product 183,000,000lb. There are 70,000 bee-keepers in the United States, but the average which they get from their hives is only 22lb., whereas the average in England is 50lb. The industry of bee-keeping has been somewhat neglected in this country. It was recently stated that in the county of Kent (by no means an exceptionally good county for honey production) 400 tons of honey might, if the bee-keepers were sufficiently skilful, be produced each year, of the value of £33,600.

660. What is the greatest number of people that ever went up in the same balloon?

Thirty-seven. An experienced French aeronaut, M. Nadar, in 1862, made a successful ascent accompanied by fourteen other persons, while in the following year, in his colossal balloon, "Le Géant," M. Nadar and his assistant made another ascent, accompanied by thirty-five soldiers. The car to this balloon was a cottage in wicker-work, giving plenty of room for the thirty-seven voyagers who made the ascent on that occasion. They ascended on Sunday, the 18th October, 1863, in the presence of about half a million spectators, and effected a descent, after a flight of seventeen hours, in Hanover on the day following.

661. Who owns the most powerful microscope in the world?

Mr. H. Sorby in 1865 exhibited his spectrum microscope, by which the millionth of a grain of blood was detected. A giant amongst microscopes has recently been exhibited at Chicago by the Munich Poeller Physical and Optical Institute, to whom it belongs. This instrument has, under ordinary conditions, a magnifying power of 11,000 linear perspective, but by immersing the lenses in vaseline oil, more powerful objectives can be used, which will magnify 16,000 diameters. To give an idea of this power, it may be said that the well-known vinegar eel, which is scarcely visible to the naked eye, would appear on the screen as a serpent, more than 100ft. long; while the finest flour would look like a heap of rough stones. The best microscopes are usually supplied with six or seven object-glasses—varying in power from 20 to 2,500 diameters.

662. What is the highest price ever paid for a Christmas card?

The highest price at which Christmas cards are sold is five guineas, while the great bulk range from 5s. to 2s. 6d. down to six or ten for one penny. Cards which would, if sold, cost enormous sums of money are painted by several of the best artists for their intimate friends. Some of the designers of cards earn as much as from £700 to £1,000 per annum. Mr. Poynter, R.A., received 500 guineas for a design, and Miss Rebecca Coleman £25 for another. Amongst amateur designers of Christmas cards Mr. Frank Lockwood, Q.C., M.P., may be singled out as the producer of many original and unique ideas, whilst most painters of repute invariably design something seasonable for their friends. These are highly prized. The Princess of Wales annually orders about £15 worth of Christmas cards.

663. Where is the largest willow-tree in England?

At Boreham, Essex, for quality and size, was one of the finest willows on record. It measured, when down, 101ft. long, 5ft. 9in. in diameter, weighed upwards of eleven tons, and was as sound as a bell. It was planted in 1835, and was taken down April 19th, 1888, for the sole purpose of making cricket bats, 1,179 being made out of it. There are several celebrated willow-trees in this country. One near Bury St. Edmunds is almost 80ft. high, while the stem measures 19ft. in girth; it is called the "Abbot's willow," and is supposed to have been planted before the dissolution of the monastery in the reign of Henry VIII. Another celebrated tree, the "Bedford willow," grew at Lichfield, and is said to have been planted by Dr. Johnson. The trunk at 6ft. above the ground measured 21ft. in girth, and extended 20ft. in height of that vast size before dividing into enormous ramifications. The whole trunk, thus comprising about 120ft. of solid timber, continued until April, 1829, when the tree was blown down by a violent storm. The most complete collection of willow-trees in cultivation in Great Britain is that at Woburn, the seat of the Duke of Bedford.

664. Have photographs ever been taken under water?

Photographs under water have been successfully taken on several occasions. The Prince of Monaco has obtained very successful negatives of the ocean bed under electric illumination, and his yacht, the *Princess Alice*, is furnished with a complete photographic equipment and laboratory. A submarine observatory, in which photographs can be taken,

exists at Naples, constructed by Signor Toselli. It is a steel chamber with plate-glass floors, and a collapsing float to sink it to different depths. It can accommodate eight persons, and is illuminated by electric light. Two Scotch photographers have devised an apparatus for taking photographs under water, and have produced several submarine pictures of the bottom of the sea in the Firth of Clyde, near Gourock. M. Louis Boutan has succeeded in taking submarine photographs under various conditions. A camera constructed for several successive exposures was inclosed in a metal box provided with plane-parallel glass windows mounted in copper rings. The apparatus was fixed on a heavy stand provided with weights, so as to give it a steady footing on the sea bottom. Near the shore, in shallow water, the camera could be placed in position without the necessity of the observer entering the water, and negatives were obtained by direct sunlight in about ten minutes. With an exposure of thirty minutes, negatives could be obtained at the greatest depth ever reached by a diver.

665. What is the longest time any bird has existed without food?

The South American Indians assert that the condor can fast for forty days. The raptorial birds are satisfied with a single repast, and as those which feed upon carrion and do not capture their own prey cannot find the wherewithal to satisfy their appetites at will, they are frequently compelled to endure long periods of hunger. An eagle can live twenty eight days without food. There are instances on record of hens being left accidentally without food for three or four weeks. When discovered they were in a very exhausted state, but soon regained their appetites.

666. Which quadruped is the best leaper?

The flying lemur, which can accomplish leaps of as many or more yards as the second best leaper amongst quadrupeds can accomplish feet. This species of lemur is provided with a kind of parachute arrangement, which connects its fore and hind limbs, and also its tail, in one sheet for supporting it in its immense leaps through the air. It has been observed in some of its flying leaps to swoop through the air for a distance of between 200ft. and 300ft., or very nearly the full length of Westminster Hall, or three times the length of the House of Commons. These leaps are made from trees either to the ground or to another tree at a lower elevation. The best leaper from the ground amongst quadrupeds is the kangaroo, which covers,

without difficulty, between 60ft. and 70ft. It can leap clean over a horse, and takes fences from 12ft. to 14ft. in height. Specimens of this Australian leaper can be seen at the Zoological Gardens. The jerboa, which looks like a kangaroo in miniature, progresses over the ground by a series of leaps so rapid, that it seems to skim over the surface like a bird. The jumping hare can clear between 20ft. and 30ft. at a single bound.

667. Who were the first ladies admitted to the order of knighthood?

The ladies of Tortosa, a town in Spain, who signalized themselves in one of the combats between the Spaniards and the Moors. The ladies courageously mounted the ramparts of their town and performed such prodigies of valour, that Raimond Berenger, Count of Barcelona, instituted for them, in 1170, the military order of Knighthood of the Hacha, or Flambeau. They merited and obtained in the same year several honourable privileges, most of which have since become obsolete. They retained, however, until the early part of this century the right of precedence in matrimonial ceremonies, let the rank of the men be ever so distinguished. Ladies Harlcourt, Gray, and Suffolk were knighted in the reigns of Edward III., Henry V., and Henry VI.—as Knights of the Garter they wore the emblem above the elbow on the left arm. In the reign of Elizabeth—at the time of the Armada—Lady Cholmondeley, of Vale Royal, near Chester, known as "the bold lady of Cheshire," received the honour of knighthood from the Virgin Queen. Two orders of knighthood for women have been instituted in this country during Her Majesty's reign, viz., the Royal Order of Victoria and Albert, consisting of four classes, the first two for Royalties, and the third and fourth for peeresses and ladies in attendance on the Queen; and the Imperial Order of the Crown of India, founded in 1878 for Royalties and the wives and relatives of Indian princes and high Indian officials.

668. On what railway in the world are sails used?

On the Kansas Pacific Railway, on which cars with sails are used for the long stretches of level land. The masts are eleven feet high, and the sails triangular-shaped, with two booms. It is stated that on the plains a speed of forty miles an hour has been attained by these sailing trains, with the wind right abeam and the sail close-hauled, over a road full of ugly curves. In the early days of railways the Baltimore and Ohio Road had recourse to the wind as a motor, and a sailing car, known as the Meteor, was invented by Evan Thomas, and ran

for some time, "whenever the wind was favourable." The 'Charleston Courier' of March 20, 1830, describes an experiment with a car on the South Carolina Railway. Sail cars have also been used on the level roads of Holland, Spain, and China.

669. How many lobsters are eaten daily in Great Britain?

Between seventy and eighty thousand. The greater part of the lobsters eaten in this country come from Norway and Nova Scotia. In the case of London, they are not brought to market at once, but are kept in perforated boxes in the Thames, so that the demand for them can be met as it arises. Of the 27,000,000 lobsters consumed in this country in the course of a year, the home fisheries of the United Kingdom only yield 1,810,000. The average wholesale price of the lobsters caught by the United Kingdom fishermen in 1891 was 10s. 8½d. per dozen; £4 9s. 2¾d. per hundred, and £44 12s. 3½d. per thousand. Of the lobsters exported from Halifax, N.S., three-fourths are sent to Great Britain. Recently vessels have been bringing live lobsters to this country from Canada, and if the venture proves sufficiently successful, one or more steamers will be built for the trade, each with a capacity for 250,000 lobsters, and making about fourteen trips a year.

670. In what city has the largest number of hotels been erected in the shortest space of time?

In the course of eight or nine months previous to the opening of the Chicago Exhibition in that city, more than one hundred large hotels were built, a few of them capable of accommodating 1,000 visitors each; some were only temporary constructions, but some are permanent, well constructed buildings. Counting the smaller hotels capable of holding about fifty persons each, the total number built near Jackson Park was 278.

671. In which country does all the land belong to the State?

In China, where only a trifling sum per acre, never altered through long centuries, is paid as rent. There is no other tax in that country, and it amounts to but 2s. 6d. per head. The soil in China is so rich that the holdings are generally very small, and it has been estimated that a square mile is capable of supporting 3,840 persons. In Chili all mining land is considered as belonging to the State, and can be worked by anybody on payment of an acreage tax, compensation being paid to "owners" only in case of actual property destroyed.

in the Dutch possessions in Java, or that whole island except the most western portion, all the land belongs to the State, and is let on hereditary lease. On September 18th, 1811, when Holland felt forced to yield to Napoleon I., this territory was taken by the English, who instituted a free land system, but they restored it to the Dutch in 1814, and in 1830, the old plan, called the "Culture System," was revived. Previous to the Reformation, 50 per cent. of the land in England belonged to the Church.

672. What is the longest name ever given to an English child?

One for every letter of the alphabet. Anna Bertha Cecilia Diana Emily Fanny Gertrude Hypatia Inez Jane Kate Louise Maud Nora Ophelia Quince Rebecca Starkey Teresa Ulysis Venus Winifred Xenophon Yetty Zeus Pepper, daughter of Arthur Pepper, laundryman, and Sarah, his wife, who was born at West Derby, Liverpool, on the 17th of December, 1882. The daughter of the Archduke Stephen of Austria bears Christian names as follows: Maria Immaculata Caroline Margarethe Blanca Leopoldine Beatrix Ignaz Josefine Rafaela Michela Anna Stanislaus Hieronymus Camird Katharina Petra Cecilia—eighteen of them altogether. The Rev. Ralph William Lyonel Tollemache-Tollemache had a fondness for long names. His eldest boy was christened Lyulph Ydcrallo Odin Nestor Egbert Lyonel Toedmag Hugh Erchenwyse Saxon Esa Cromwell Orme Nevill Dysart Plantagenet; while a daughter is Lyona Decima Veronica Esyth Undine, Cyssa Hylda Rowena Adela Thyra Ursula Ysabel Blanche Lelias Dysart Plantagenet. A clergyman informs us that a friend of his rejoices in having the names of the twelve Cæsars tacked on to his surname. And the same was the case with one of his old vergers who died in May, 1891. The unabridged name of the King of Siam consists of forty-six designations, though His Majesty is called for short Chulalonkorn I.

673. Which beauty show ever held had the largest number of entrants?

Those of the late P. T. Barnum and Messrs. Pears, the noted soap manufacturers, in 1889, when the entrants in each show numbered several thousands. In the case of Pears' show these were gradually reduced by successive leets arranged by the adjudicators, until the list was reduced to four to receive the leading prizes of £50, £25, £10, and £5. For a beauty show at Spa, in 1888, 350 candidates sent in their photos, which were finally reduced to twenty actual competitors. The show lasted

fourteen days, when each of these ambitious beauties had to sit every evening to be gazed at by the spectators, who paid 5frs. for the privilege. A beauty show was held at Nice recently; the first prize was £40 in cash, £24 for the second, and £12 for the third. Competitors from abroad received the cost of their journeys, and on their arrival were boarded and lodged free at a first-class hotel. A male beauty competition was held some years ago at Vienna. The jury consisted of fourteen ladies—who awarded the first prize to a wine merchant, the second to a gentleman who owned a well-kept and flowing moustache 20in. in length; a barber received a third prize as having the longest nose, and a book-keeper was awarded the lowest prize for the finest specimen of a bald head.

674. Which is the most fatal mission-field for Englishmen?

Sierra Leone, on the West Coast of Africa, unquestionably. It has sometimes been styled the "White Man's Grave," and no fewer than three bishops in succession died within three years of their consecration. In the first twenty years of the mission's existence fifty-three missionaries or missionaries' wives died at their posts. In 1823, out of five missionaries who went out, four died within six months; in the next year six volunteers were accepted, and of these two died within four months of their landing. These losses seemed to draw out more zeal, for next year three more went forth, of whom two died within six months.

675. Which country in Europe circulates the smallest coin in currency?

Portugal. The Portuguese coin representing three-reis is worth twelve one-hundredths of a penny. There is no one-reis piece coined. A thousand reis are equal to one milreis, which at the average rate of exchange is worth about 4s. 5d. in English money, or about four and a half milreis to the pound sterling. The five-millesima coin of Gibraltar is worth about one-eighth of a penny. The smallest English coin in value now issued is the farthing, but at one time half and one-third farthing pieces were coined. The smallest English coin in size is the silver threepenny piece; while the Italian silver centesima is a slightly smaller coin. In the southern part of Russia the peasants use a coin of such small value that it would take 250,000 of them to be worth a 5s. piece, and these coins are so scarce that a man who has a hundred is looked upon as rich, and one who has a thousand is considered very wealthy. An old Japanese iron coin—the mouseng—was

worth not more than one-224th of a penny; while in the Malay Peninsula the natives have in use the very smallest current coin in the world. It is a wafer made from the resinous juice of a tree, and its value is about the one-10,000th of a penny. In the coins last named, in exchange for an English penny one would get from a handful to a bagful of those small coins.

676. What company was registered in this country with shares of the lowest value?

The Ancient Gold Fields of Africa, Limited, was registered with a capital of £10,000, divided into 9,600,000 shares of the value of one farthing each. The first investors of a farthing each in this remarkable company were a clerk at Greenwich, a contractor at Forest Gate, a clerk at Stoke Newington, an accountant at Leyton, a flour salesman at Clapton Park, and an engineer in the Strand. There are over 11,000 companies in the United Kingdom, with a capital of more than 600 millions. In one year, 1889, the new companies registered showed a capital of 222 millions sterling. The total capital subscribed for in that year was £125,400,000 and the amount paid in calls £39,300,000.

677. Has any cargo of live fish ever been exported from this country?

In September, 1893, a cargo of young perch *(perca-fluvialis)* was shipped to India by the screw steamer *Clan Macpherson* from the Marquis of Exeter's famous fishery at Burghley House, Northamptonshire. The Neilgherry Fish and Game Association have for some time been desirous of introducing these fish into the Ootacamund waters at Madras, and the matter was placed in the hands of Mr. W. T. Silk, the Marquis of Exeter's pisciculturist, who had special tanks constructed for their conveyance. There are several establishments for the promotion of fish culture in the United Kingdom. The Midland Counties Fish Culture establishment at Malvern Wells contains two hatcheries, and 100 ponds capable of accommodating 6,000,000 of ova. Sir John Maitland owns another at Stirling for hatching salmon and trout. Mr. Armistead owns the Solway Fishery, and Mr. J. Andrews works another at Guildford. A large hatchery for sea fish has been erected at Dunbar, which will hatch millions of food fishes for distribution throughout the various fishing grounds around our coasts. In the United States there is a car specially prepared for the transportation of live fish across the continent. It is fitted up with tanks, in which fish are distributed, according to their habits, for exportation to California.

678. How many musical festivals are held in this country in each year?

Nine were held in 1893, two of which are held annually, namely, the Gregorian Musical Festival, at St. Paul's, London, and the Eisteddfod, or Welsh Musical Festival, held in 1893 at Pontypridd. The other seven, which are held triennially, were: Bristol, Cardiff, Cheltenham, Hovingham (two days), Yorkshire, North Staffordshire, Norwich, and Worcester (held alternately at Gloucester, Hereford, and Worcester). Three other musical festivals are held triennially in this country, namely, the Handel Festival at the Crystal Palace, Sydenham, and the Musical Festivals at Chester and Leeds. At the Norwich Festival in 1893, five new works were presented. These were Mr. Cowen's cantata, the "Water Lily"; Mr. Gaul's cantata, "Una"; Mr. J. F. Barnett's cantata for female voices, the "Wishing Bell"; Mr. German's Second Symphony; and a Polish Fantasia for piano and orchestra by M. Paderewski.

679. Does any bird leave the egg fully feathered?

This is the case with the talegalla, of Australia. This peculiar bird is about the size of a turkey; the whole of the upper surface, wings and tail, is blackish-brown; the feathers of the under surface blackish-brown at the base, becoming silvery-grey at the top; skin of the head and neck deep pink-red, thinly sprinkled with short hair like blackish-brown feathers; wattle bright yellow, tinged with red where it unites with the red of the neck; bill black, irides and feet brown. The talegalla does not sit on the eggs, but, having made a great mound of vegetable material, which will develop sufficient heat, deposits the eggs at a depth of several feet, the eggs not being laid side by side, but having a distance of 9in. or 12in. between each other, with the large end upwards, and then covered up. The heat of the mound hatches the eggs, and the birds, on leaving the shell, are fully feathered. Recent observations have shown that the young talegallas have a downy covering, which gives place to the new feathers, which become developed and push the down off before the bird leaves the egg, and thus the first moulting takes place within the shell.

680. When were the first and last State lotteries drawn in this country?

The first State lottery took place on the 11th January, 1568–69, in the reign of Queen Elizabeth, in a building erected for the purpose at the west end of St. Paul's Cathedral, the drawing continuing day and night until May 6th of the same year. The tickets were on sale for nearly two years

previously. The highest prize was £5,000—£3,000 in cash, £700 in plate, and the remainder in tapestry. The total number of lots was 400,000, and the profits were devoted to the repair of harbours. It is estimated that from 1793 to 1824 the British Government raised on the average £346,765 every year by means of lotteries. Amongst the more noted lotteries was one in the interests of the British Museum in 1753; one on the sale of Cox's Museum in 1773; one for the building of the Adelphi; and the lottery for the Pigott diamond in 1801. On the 18th of October, 1826, the last State lottery was drawn in England (abolished by 6 George IV., c. 60). The ceremony took place in Cooper's Hall, Basinghall Street. One of the first acts of the American Congress of 1776 was to institute a national lottery, and the people welcomed it with great joy, but the numerous private lotteries which gave rise to many scandalous abuses aroused public opinion against them, and in most of the States Acts were finally passed entirely prohibiting the establishment of anything having the nature of a lottery.

681. Do plants breathe?

Plants, like animals, breathe the air; plants breathe through their leaves and stems just as animals do by means of their respiratory organs. When a young plant is analyzed it is found to consist chiefly of water, which is all removed from the soil; there is about 75 per cent. or more of this fluid present, and the rest is solid material. Of this latter by far the most abundant constituent is carbon, almost every atom of which is removed from the atmosphere by the vital action of minute bodies contained in the green leaves. The carbon is taken into the plant as carbonic acid gas. Plants also absorb oxygen, hydrogen, and nitrogen from the atmosphere in different quantities through their leaves, and also by means of their roots. These new products stored are in turn used in building up the different organs of the plant. Plants give off used-up moisture through their leaves, just as animals perspire through the pores of their skins. Calculations have been made as to the amount of water thus perspired by plants. The sunflower, only 3½ft. high, with 5,616 square inches of surface exposed to the air, gives off as much moisture as a man.

682. At what rate does thought travel?

One hundred and eleven feet per second, or about a mile and a quarter per minute. Elaborate experiments have been made by Professors Helmholtz, Hersch, and Donders to ascertain the facts on this question, the result of which was that they found the process of thought varied in rapidity in different individuals, children and old persons thinking more slowly

than people of middle age, and ignorant people more slowly than the educated. It takes about two-fifths of a second to call to mind the country in which a well-known town is situated, or the language in which a familiar author wrote. We can think of the name of the next month in half the time we need to think of the name of the last month. It takes on the average one-third of a second to add numbers containing one digit and half a second to multiply them. Those used to reckoning can add two to three in less time than others; those familiar with literature can remember more quickly than others that Shakespeare wrote "Hamlet." It takes longer to mention a month when a season has been given than to say to what season a month belongs. The time taken up in choosing a motion, the "will time," can be measured as well as the time taken up in perceiving. If it is not known which of two coloured lights is to be presented, and you offer to lift your right hand if it be red and your left if it be blue, about $\frac{1}{13}$th of a second is necessary to initiate the correct motion. Scientists have been able to register the sound waves made in the air by speaking, and thus have determined that in order to call up the name belonging to a printed word about one-ninth of a second is needed, to a letter one-sixth of a second, to a picture one-quarter of a second, and to a colour one-third of a second.

683. In what part of London was a tomb erected with a Persian inscription?

In the churchyard of St. Botolph's (rebuilt 1741-44), Aldgate, at the corner of Houndsditch, there was erected a tomb with a Persian inscription. This tomb is over the grave of a Persian merchant, Hodges Shangsware, who was buried in "Petty France," a part of the cemetery unconsecrated to Christian burials, on the 10th of August, 1626. It was erected by the merchant's son, and is of stone, with certain Persian characters thereon, which, translated, read as follows: "This grave is made for Hodges Shangsware, the chiefest servant to the King of Persia for the space of twenty years, who came from the King of Persia and died in his service. If any Persian cometh out of that country, let him read this and offer a prayer for him. The Lord receive his soul, for here lieth Maghmote Shangsware, who was born in the town of Novoy, in Persia."

684. Has a convict after serving his term ever refused to be set free?

Several cases of this kind have occurred. At Graudenz a prisoner was released a short time ago who was convicted in 1850 of a double murder and condemned to death, but his

sentence was commuted by King Frederick William IV. to penal servitude for life. He is a Russian subject, and was then twenty years of age. Having always comported himself well while in prison, Kaiser Wilhelm recently pardoned him, and he was set free and conducted to the Russian frontier. But the old man—he was then sixty-four years of age—wept bitterly as he regained his freedom, not knowing where to go or how he should earn his livelihood, and he expressed a strong desire to be allowed to remain a convict. Mr. William Tallack, in his lecture on prisons and criminal treatment, tells a strange story of a prisoner who was confined for the greater part of his life in a Philadelphia prison. After he was set free his life became a burden to him, and he returned to gaol, begging to be allowed to finish his life there, among his old friends the officers. Comte de Lorge was confined for thirty years in the Bastille, and, when liberated, declared that freedom had no joys for him. After imploring in vain to be allowed to return to his dungeon, he lingered for six weeks and pined to death.

685. How do sea birds quench their thirst?

Sea birds are believed to satiate their thirst partly from the falling rains and partly from the fat and oil which they devour ravenously when opportunity puts them in their way. The keen eyesight of birds is well known, and sea birds have been observed flocking towards the storm cloud, about to burst, from all points of the compass, and apparently drinking in the water as it descends from the skies. They scent a rain squall, says an old skipper, a hundred miles or even farther off, and scud for it with almost incredible swiftness. Sea birds obtain fat and oil from the fish which they catch, and on which they subsist, and they have also been known to follow ships for considerable distances, picking up scraps of fat which may be thrown overboard. These birds are believed to be able to remain for several days, and even weeks, without being compelled to seek for water; though, at the same time, their marvellous speed of flight would soon enable them to cover, when necessary, the distance between them and fresh water on the nearest land.

686. Has a salvage corps of Newfoundland dogs for saving drowning persons been established anywhere?

Some years ago it was resolved at Paris to take advantage of the peculiar gifts of the Newfoundland dog for rescuing drowning persons. Ten select Newfoundland dogs were brought to the French capital, and appointed as savers of human life in the River Seine. They were first exercised in drawing

out stuffed figures of men and children from the water; and in time they acquired such skill and facility in their business that they proved themselves eminently serviceable. For a time these dogs were discontinued, but in 1893 it was proposed to continue them again in Paris, and at present they are doing excellent service.

687. Is any case recorded of an individual seeing in the dark by the light of his own eyes?

Yes; persons who suffer from "Lucifuga"—a curious form of sight derangement—are unable to see except at night, or when in deep shade. Those who have to remain in enforced darkness for a considerable period are often afflicted with this disease. Prisoners freed from the Bastille a hundred years ago, after a term of long imprisonment in very dark cells, were noticed to suffer from the disease "Lucifuga." Helmholtz was the first to discover that the fundi of the eyes is self-luminous, and that he could see the movement of his own arm in the dark by the light of his own eyes. Hence, perhaps, the glow of some animals' eyes in the dark. Capsume, the little slave boy whom Gordon rescued and brought from the Soudan, used to say that Gordon could see in the dark, because there was light in his eyes. Men of uncommon imaginative power and mental activity are, in Mr. Tesla's opinion, most likely to possess this power, which he calls fluorescence of brain action.

688. What is the longest time a ship's cargo on fire has continued to burn?

Upwards of twelve months. This was so in the case of a vessel called the *Ada Iredale*, engaged in the China trade. She was bound for San Francisco from Scotland with a cargo of coal when the fire occurred, which is supposed to have arisen from spontaneous combustion. The ship was abandoned in October, 1876, when nearly 2,000 miles from the Marquesas Islands, in the South Pacific Ocean. The crew took to the boats, and at length succeeded in reaching the Marquesas. Meanwhile the ship, now a derelict, with cargo still burning, drifted westwards in the equatorial current to Tahiti, a distance of 2,420 miles. Finally she was towed into port, and her cargo continued smouldering for more than a year.

689. What insects cultivate plants for food?

This is done by the gardener, or leaf-cutting ants. Herr Alfred Möller had a number of these ants under close observation for a considerable time at Blumenau, and proved that these industrious creatures displayed a very high degree of intelligence. They not only cultivate the fungi on which they

exist, but by judicious selection they have evolved a specially suitable variety, with swollen lateral branches. Their fungus garden is inclosed, protected from the light, and thither the ants carry strips of leaf, crushed up by their mandibles, to supply their crop with organic food. An unsuitable material is so carefully weeded out by these busy little insects, that a sample of the earth of their garden, when grown in a nutritive solution, gave a perfectly pure culture, free from all bacteria.

690. What civilized country in the world has the worst roads?

A writer on country roads and highways in America says that the roads in that country are as bad as they can be. They are so generally bad that native-born Americans, who have never travelled abroad, cannot be brought to believe that good roads are possible. Governor Hill not long since said: "The present condition of our highways is disgraceful. For a great part of the year many of them are almost, if not quite, impassable. The fault has been in ignorance of construction, in lack of responsibility, and in waste of energy and money in maintenance." The common roads and highways of the United States are in a condition at present somewhat similar to that which prevailed in England and other parts of Europe 150 years ago. The Spanish roads are like everything else in Spain, not so good as they once were, and worse than they ever should have been. France has now the best roads of any country in the world, and at a less cost than that which is paid elsewhere for highways much inferior. There are also excellent roads in Switzerland. In Germany the roads are good as compared with those of the other countries of Northern Europe. Russian roads are good in the neighbourhood of the very large cities, but wretched, as a rule, in country districts. What has been said of Germany applies equally well to Austria and Hungary.

691. Have prayers ever been offered up in churches in this country for success in a lottery?

During the closing years of last century, when the State lottery mania was at its height, clergymen were paid by those who had risked money in these lotteries to put up prayers in church for their success. A gentlewoman in Holborn, whose husband had presented her with a ticket, put up prayers in the church the Sunday before the drawing in the following terms: "The prayers of the congregation are desired for the success of a person engaged in a new undertaking." A witness before the House of Commons Committee of that day showed that

the investing public lost yearly, by licensed lotteries, as much as one and a third millions sterling, which mainly went into the pockets of rogues and unscrupulous speculators.

692. Does any British railway company keep a maker of artificial limbs in its employ?

At least two large railway companies do this, viz., the North-Eastern Railway Company and the London and North-Western Railway Company. The first-named company has a regularly-appointed maker of artificial limbs in its employ, while the London and North-Western has two men in its carpentering department at Crewe who are constantly employed in the manufacture of artificial limbs, to replace any that employés of the company are so unfortunate as to lose in its service. There are upwards of 30,000 persons in this country who have lost one or both legs. The annual output of artificial limbs is 15,000.

693. Who has the best collection of tobacco pipes in England?

Captain Bragge, whose collection contains 5,000 specimens, ancient and modern, and of every degree of merit. These include clays of the 16th century; wooden pipes from Switzerland; very ancient pipes from Germany, of china and porcelain; French pipes of great antiquity, made from curious woods; Swedish pipes, of copper and stone; Russian, of silver, nickel, and malachite; Turkish pipes, of glass, metal, and clay; Italian pipes, centuries old, of terra-cotta and olive wood; Spanish pipes, of various woods, and a material resembling meerschaum; African pipes, from the interior of the Dark Continent; venerable Chinese pipes, of almost mythical age; and pipes used by the Hindus in their temples, as well as jade pipes from Mexico. The Prince of Wales has a very large and valuable collection of pipes of all kinds. The tobacco pipe in its present form—bowl, stem, and mouthpiece—was invented by Dr. Johann Franz Jakob Villarius, in 1690; and the first tobacco pipe manufactory was started in Vienna the same year. In ancient days the rich smoked silver pipes, and the poor used walnut-shells, with straws for stems.

694. Has liquid air ever been conveyed from one English city to another?

Professor Dewar, of the Royal Institution, successfully conveyed, in 1893, a considerable quantity of liquid air from London to Cambridge, where it was exhibited to the students at Peterhouse College. The liquid air was carried in one of the double glass flasks, the space between the inner and outer

flask containing extremely attenuated mercurial vapour, together with a little liquid mercury. On pouring the liquid air into the inner flask, its outer surface was rapidly covered with a mercurial film of extreme thinness, forming a reflecting surface highly impervious to radiant heat. As soon as this was formed, the whole apparatus was packed in solid carbonic acid, which at once froze the liquid mercury, arrested the deposit upon the mirror, reduced the mercurial vapour to an infinitesimal quantity, formed an almost perfect vacuum, and supplied an envelope 80deg. below zero. Thus protected, the liquid air reached Cambridge with only a trifling loss of bulk, notwithstanding the incessant jolting of the railway.

695. How is a volume of sound measured?

Sound arises from vibrations giving a wave-like motion to the surrounding atmosphere, the wave gradually enlarging as it leaves the source of disturbance, whilst at the same time the motion of the air particles becomes less and less. The simplest method of determining the number of vibrations of a sound is by means of Savart's apparatus. This consists of two wheels—a toothed or cog-wheel and a driving-wheel. They are so adjusted that the cog-wheel is made to revolve with great rapidity, its teeth hitting upon a card fixed near it. The number of revolutions is indicated by a counter attached to the axis of the cog-wheel. Suppose that sound is travelling in the air at the rate of 1,000ft. per second, and that Savart's wheel is giving a sound produced by 200 taps on the card per second, it follows that in 1,000ft. there will be 200 waves or vibrations, and if there be 200 waves in 1,000ft., each wave or vibration must be 5ft. in length. The velocity of sound through air varies with the temperature of the latter, but is usually reckoned at 1,130ft. per second.

696. Has anyone ever succeeded in transmitting conversations along a ray of light?

Professor Graham Bell succeeded in doing so by means of his photophone, which, in combination with the telephone, made it possible to convey sounds by a ray of light either solar or electric. The principle of the instrument is the effect of light on the electrical resistance on selenium. The photophone consists of a transmitter for receiving the voice and conveying it along the ray of light, and a receiver for taking the light and converting it into sound, the receiver being the telephone. A small mirror, usually of silvered mica, is suspended freely for vibration. A lens is used to transmit to this the beam of light, and this beam is again reflected by another lens to the

receiver, which consists of a reflector with a cell of selenium in its focus, connected with the telephone and battery. The speaker stands behind the mirror, and the sound of his voice against the reverse side makes it vibrate in unison with the sounds uttered. The movements cause a quivering in the reflected beam of light, and this in its changing intensity acts on the selenium, which changes to resistance accordingly, and through the telephone gives forth a sound. Professor Bell subsequently found that the transmission of sound is possible without the agency of a selenium cell, galvanic battery, or wires of any kind, and that non-luminous heat-rays are themselves capable of producing sound. In his new instrument, the radiophone, which was exhibited at Chicago, instead of a selenium cell at the receiving end, the soot of charred cork is used, as being of far greater sensitiveness for the purpose, and the mechanism is reduced to a minimum. Light travels from the sun to the earth in 8½ minutes, and a ray of light travels around the world in the space of the eighth of a second.

697. Are there "mounted" nurses in any part of the British Empire?

There are "mounted" nurses in India in connection with the Army. The Indian Government now grants a monthly allowance of thirty rupees for the up-keep of a horse (as allowed to military officers) to each lady of the Indian Nursing Service; the allowance to continue for such time as she may be employed on field service, provided that she keeps a horse or pony during that period. Free conveyance is also granted for the horse or pony to and from field service. Army and Navy nurses must all be ladies of good social position, and they are required to undergo three years' training in a general hospital. They are called Her Majesty's Nursing Sisters, and may be ordered on active service in any war. As a reward for special service, they receive the Order of the Royal Red Cross.

698. What is the highest price ever paid for a magic lantern?

A magic lantern was made by Hughes, of Kingsland, of aluminium, for Major Gladstone, at a cost of nearly £300. Another was made by Tyler, of London, for Mr. Heath, of Hereford, at a cost, complete, of considerably over £200. These expensive lanterns are triumphs. The magic lantern used at the various lectures delivered at the Crystal Palace, at Sydenham, is one of the most perfect lanterns in existence. It produces pictures 9ft. in diameter, and cost over £150. The oxyhydrogen lantern with which Mr. Harry Furniss illustrates his entertain-

ment, "The Humours of Parliament," cost nearly 150 guineas. Mr. Tyler owns a lantern, the lens alone, by Voightlander, costing £40. It was used on the 11th of December, 1893, at the Imperial Institute, London, when it was placed 75ft. away from the screen, and gave a perfect picture 25ft. in diameter, clear and sharp to the edge. One of the most expensive magic lanterns of the time was presented by the Fellows of his college, Gonville and Caius, at Cambridge, to the Rev. Charles Frederick Mackenzie, when, in 1855, he accompanied Bishop Colenso to Natal, South Africa, as Archdeacon. He, in 1860, was consecrated Bishop of Southern Central Africa. He himself selected the magic lantern as the form of his present, thinking it would be useful in teaching the natives. It was, at that time, considered one of the best lanterns ever made, and cost over 100 guineas.

699. What has been the dearest price of an illustrated Bible issued in parts?

One guinea a part, which was the price at which each of the seventy parts of "Macklin's Bible" was issued. Charles Macklin's splendid edition of the Bible was published in 1800 in seven folio volumes (ten parts to a volume), which were illustrated with engravings from pictures and designs by the most eminent artists of that day. The Apocrypha was published, in 1816, at eighteen guineas. At Mr. Beckford's sale, in 1817, a set of the two were sold for £35 14s. It was one of the Macklin Bibles which William Bowyer transformed into the famous "Bowyer Bible," by means of illustrations. He devoted nearly thirty years to illustrating it, and procured, from every part of Europe, engravings, etchings, and original drawings relating to Biblical subjects; and these, to the number of 7,000, he interleaved with his Bible. From Michael Angelo and Raffaelle, to Reynolds and West—every artist whose Scripture subjects had been engraved was brought into requisition. Its most original features were two hundred engravings by Loutherbourg. After many changes of ownership, it was sold as part of a gentleman's library at Bolton, Mr. Heywood, of that town, purchasing it for £550. A London publisher sends out an illustrated edition of the Bible in halfpenny parts.

700. Which rural parish in England was the first to adopt the Public Libraries Act?

That of Middle Claydon, in Buckinghamshire, four miles from Winslow, with a population of 225, which adopted the Public Libraries Act in 1893 by a majority of twenty-three,

votes to three, or more than seven to one. This is the first instance in England of the adoption of the Act in a purely rural parish. Under the earlier Public Library Acts, Manchester established in 1852 the first free library, the opening ceremony taking place on September 2nd. Bristol, however, lays claim to being the first, and John Taylor, the chief librarian of the Bristol Public Library, has taken up its defence. In 1891, says Mr. Thomas Greenwood, in his history of the movement, there had been 238 adoptions since the first Act was passed in 1850; of these 133 were spread over the thirty-six years between 1850 and 1886; while the remaining 105 took place in the five years ending 1891. In 1893 Glasgow was the only city in the United Kingdom of over 100,000 inhabitants which had not adopted the Library Act. Before 1886 there were only two parishes in London provided with free libraries, while in 1890 twenty-one had been established within the boundaries of the Metropolis, and which number has been increased during the past four years. The Wandsworth Free Library, which was opened on October 1st, 1885, was the first opened under the Public Libraries Act in any district or suburb of the Metropolis.

701. What is the youngest age at which anyone has been charged with bigamy?

Six years of age. At this early age a little Indian girl and her boy-husband, aged nine, were recently tried at the Criminal Sessions at Berhampur on a charge of bigamy. They were indicted for marrying, the girl being at the time, to the knowledge of the bridegroom, already, under the barbarous Indian custom of child-betrothal, the wife of another. As the Act only allows presumption of death after seven years of continuous absence of one of the parties, it was justly observed that a bride of six could not possibly plead that excuse. For three days little Lilith stood beside her fellow-bigamist in the dock, while their respective parents were charged with abetting the offence. Ultimately the jury returned a verdict of "Not Guilty." On June 29th, 1840, Robert Taylor, who was under twenty years of age, was tried at Durham, charged with six acts of bigamy, and with obtaining money by marriage under the pretence of being heir to large properties. Two of the charges of bigamy were proved against him, and he was sentenced to imprisonment for two years and a half. On August 25th, 1843, his term of imprisonment having expired, and a very few months having elapsed, he being still under, of course, twenty-three years of age, or scarcely more, the same

man was charged with no fewer than five acts of bigamy, of course fresh ones, and was sentenced at the Liverpool Assizes to fourteen years' transportation. At one time the offence of bigamy in this country was punishable with death, but now the severest possible sentence is seven years' penal servitude. In Hungary, a man convicted of bigamy used to be condemned to live with both wives.

702. In which part of the world is there a luminous tree?

This is to be found about twelve miles north of Tuscarora, Nevada, U.S.A. Its truly wonderful characteristic is its luminosity, which is so great that on the darkest night it can be plainly seen a mile away. A person standing near could read the finest print by its light. It is about 6ft. high, with a trunk which, at its base, is three times the size of an ordinary man's wrist. Its foliage is extremely rank, and its leaves resemble somewhat those of the aromatic bay-tree in shape, size, and colour. The luminous property is due to a gummy substance, which can be transferred to the hand by rubbing. The Indians avoid it even in the daytime, and have named it the witch-tree. In the vegetable kingdom the instances of luminosity occurring are but few, and the majority belong to the algæ or fungi. A species of moss, some grasses, a euphorbia, a lily, a poppy, and a nasturtium have been recorded as luminous.

703. Where does the most deadly plant grow?

In the neighbourhood of Philadelphia, in the United States, grows a plant so deadly that it has earned for itself the name of the "Devil Plant." It has a pleasant appearance, being of a tender green, clinging close to the earth, and sprinkled with small red blossoms, cup-shaped, and holding in their hearts a single drop of moisture, which the sun has no power to dispel, and wherein this plant's most blighting influence is said to lie. Bees by the hundred have been found dead in the blossoms, and a botanist who tasted this poison-drop declared that it was of a sickening sweetness, without odour, and like liquid gum. Allowed to dwell on his tongue, it soon began to burn and raise a blister, while the tongue became swollen and very painful. Cattle eating of it die in a few hours in great agony, with a sort of exaggerated tetanus. A specimen of a most deadly plant was grown some years ago at Kew Botanical Gardens, the *Jatropha urens*, the properties of which were so noxious that its possession was positively dangerous. The action of the plant's poison was on the heart, and circulation was stopped. In a short time the plant mysteriously

disappeared, and another specimen, which was afterwards introduced, vanished in the like unaccountable manner. It was presumed that the attendants were secretly determined that such dangerous plants should not be retained in the houses to cause the possibility of an accident such as had actually happened through it to the curator.

704. What is the "shooting" fish?

This is the beaked or rostrated chætodon, a native of the fresh waters of India. There is probably no fish in existence that catches its prey in a more peculiar manner than does this singular species. When he sees a fly alighting on any of the plants which overhang the shallow water, he approaches with the utmost caution, coming as perpendicularly as possible under the object of his meditated attack. Then, placing himself in an oblique direction, with the mouth and eyes near the surface, he remains a moment immovable—taking his aim like a first-rate rifleman. Having fixed his eyes directly on the insect, he darts at it a drop of water from his tubular snout, but without showing his mouth above the surface, from which only a drop seems to rise, and that with such effect, that though at the distance of 4ft., 5ft., or 6ft., it very seldom fails to bring its prey into the water.

705. Which individual in the world receives gifts of the greatest number of slippers?

His Holiness the Pope. Among the many valuable presents which Leo XIII. received at the Papal Jubilee in 1887 were over 1,200 pairs of slippers, some of them elaborately ornamented with diamonds and precious stones. His Holiness has such a large stock of slippers, that if he wore several new pairs every day the supply would not be exhausted for four or five years. Dr. Talmage, the well-known preacher of Brooklyn, on the last anniversary of his marriage received over 300 pairs of slippers. Cardinal Vaughan, on the occasion of his succeeding Cardinal Manning, received from his admirers amongst the female sex ninety pairs. Dr. Taylor, of New York, is similarly favoured by receiving upwards of 100 pairs annually.

706. What are the most curious conditions on which anyone has obtained an artificial leg?

Those which were made when an artificial leg was handed over to Charlie Alston, a noted negro character in Iowa, in the United States. The citizens deciding to give Alston, who was minus a leg, a good cork substitute, 300 of them formed an association, known as the Des Moines Cork Leg Association, and purchased the limb. At a crowded meeting the leg was

presented to Alston, not as a gift, but under a mortgage covering the property, and the title of which remains with the association. The amount of the mortgage is £15, and the extension of time in which to pay it runs to ten years, provided Charlie keeps on his good behaviour. Should Alston indulge in any improper conduct while wearing the leg, such as imbibing too freely, or do any other act which might cause, or tend to cause, the wearer of the cork leg to fall into disrepute, the principal and interest of the mortgage immediately become due and payable.

707. How many games of lawn tennis are played yearly in the London parks?

In the parks under the control of the London County Council, the report submitted to that body showed that, in 1893, 39,000 games of lawn tennis had been played during the season. In other London parks no official records were kept, but it is probably within the mark to place the number of such games played therein in the course of the season at 6,000, bringing up the total number of games of lawn tennis played yearly in the London parks to 45,000 on the average. A thoroughly wet season would, of course, materially affect the number of games played. The report to the London County Council showed also that 5,000 games of cricket had taken place, whilst other games were much less extensively indulged in. Amongst other amusements in the London parks in that year, 430 games at quoits were recorded, and 120 times the Canadian game of lacrosse.

708. Which church in this country has the most elaborately carved pews?

At Fressingfield Church, Harleston, Suffolk, the open pews are most elaborately carved, the work dating from the latter half of the 15th century. In one of them the back is carved with the emblems of the Passion, from the cock crowing to the seamless coat. Back, front, and sides are elaborately carved. The pews of the church at Witley Court, in Worcestershire, are finely carved, and the pulpit is of purest Carrara marble, with panels of precious stones. There is some fine carving in the parish church at Wilton, near Salisbury, which was erected by Lord Herbert at a cost of £80,000. One of the best specimens of wood carving in churches is the curiously carved screen in the chapel of King's College, Cambridge, replete with its most delicate foliated ornament and figures. Each panel in the huge screen is worthy of a place in the cabinet of the most fastidious collector. At St. Paul's Cathedral, London, on each side of the choir there is a

range of fifteen stalls, exclusive of the bishop's throne on the southern side and a stall on the northern; these are beautifully enriched with carving by Gibbons. At Ripon Cathedral the chief beauty of the choir is the carved work of the stalls, where the dean, sub-dean, and prebendaries sit. These stalls exhibit a delicacy and lightness superior even to that of those destroyed by the fire in the choir of York Minster. In Lincoln Cathedral there are sixty-two stalls for the dean and prebendaries, with elaborate canopies, and containing misereres, or half-seats, ornamented with foliage and various grave and ludicrous devices. The seats of the vicars and some others are fronted by arches, containing excellent carvings of kings and angels playing on musical instruments; the whole of these are of oak, and appear to have been executed late in the 14th century.

709. Which newspaper has published the longest leading article?

The London 'Times,' whose leading article on the Jubilee of Her Majesty, published on the 21st of June, 1887, filled rather more than eleven columns, or two full pages all but a column. It extended over 286in., or 7yds. 2ft. 10in. of column space. As a leading article in the weekly edition of the 'Times,' it filled fifteen columns. The leading article on the events of the year published on the closing day of each year generally extends to about eight columns, or 180in. One and a half to two columns, as a rule, cover the length of the longest leading articles in any of the newspapers of this country. The 'Daily Telegraph' leaders are generally of one uniform length—a column and an eighth. In the majority of the other newspapers, both in London and the country, long leading articles seem to be going out of fashion, and articles under a column in length are the rule, and longer ones the rare exception.

710. What is the cost of the most expensive electric sign ever fitted up?

One thousand two hundred and fifty pounds, which was the cost of an immense electrical sign erected, a short time since, at the south end of Madison Square, New York, and which is the largest in the world. It measures 60ft. by 68ft., and consists of 107 letters of an average height of 6ft. each, which are composed of 1,457 lamps, representing 145 horse-power. The current for operating the sign is taken from the mains of the Edison Illuminating Company at the rate of 24 cents a minute when the entire sign is illuminated. The design of the wording may be varied at will by

a system of arranging the lamps in cross-section. Electrical street signs are being brought into use in New York. A framework bearing four faces of coloured glass will be hung round the electric-light poles, about 10ft. from the ground. On each face the name of the street will appear in coloured translucent glass letters, and reflectors will project the rays of the overhead lamp through them. One of the biggest electric signs in London is that erected over the Alhambra Theatre in Leicester Square. It cost £350. At the Crystal Palace Exhibition, in the spring of 1892, there was an electric sign, serving as an advertisement to Messrs. Edison and Swan, electricians, which consisted of a screen of network, hanging from the ceiling, in which were ten thousand electric lights, each with the power of sixteen candles.

711. Has marriage ever taken place between a couple on horseback ?

Such a marriage took place in September, 1886, in the village of Henry, Clark County, Indiana, U.S., on the occasion of an elopement. While the Rev. Seymour Guernsey was holding a service in his little church at 7.30 p.m., the congregation was startled by a cry from the door. One of the wardens went to the church door, and soon returned, making an announcement that "a couple at the door wanted to get married in a hurry." They gave their names as Martin Mall and Sarah Poxley, and were both mounted on horseback. They exhibited a Washington County license, and asked the minister to marry them at once. After some deliberation, Mr. Guernsey concluded to perform the ceremony. The couple were thereupon made man and wife without their dismounting.

712. What child is believed to be the possessor of most dolls ?

The young Queen of the Netherlands, Wilhelmina I., who succeeded to the throne on the 23rd of November, 1890, on the death of her father. In the year 1893 she received a present of fifty huge dolls, which were all dressed as officers of the various regiments in Her Majesty's army ; and she at once ordered another fifty dolls of the other sex to be dressed as ladies of the Court, in order that they might entertain the gallant warriors. These hundred dolls, in addition to the considerable number she already possessed, make her unquestionably the possessor of more dolls than any other child in the world. Our own Queen, as a child was very much devoted to dolls, and, indeed, played with them till she was nearly fourteen years old. Her favourites were

small wooden dolls, which she could occupy herself with dressing, and who had a house in which they could be placed. Of her dolls, 132 are preserved. Queen Wilhelmina also has a very fine doll's house, stated to have twenty-two rooms and to have cost £550. The costliest doll's house is at Utrecht, which was originally made for Peter the Great at a cost of £2,500, being made of gold and ivory and other precious substances.

713. When did the "spiritual" outnumber the "temporal" peers in the House of Lords?

This was the case prior to the dissolution of the monasteries by Henry VIII., when the abbots and priors sat with the bishops in the House of Lords, making the number of the spiritual peers greater than the number of the temporal hereditary peers. Fuller tells us that in the reign of Henry III. sixty-four abbots and thirty-six priors sat in the Upper House; and, although those numbers were reduced in the reign of Edward I., twenty-nine still continued as members of the House of Lords until the dissolution of the monastic houses at the time of the Reformation. The spiritual peers, who now number twenty-six (twenty-four bishops and two archbishops), numbered in the days of Henry III. 126, reduced under Edward I. to fifty-five. The number of temporal peers in Henry III.'s time was under fifty, and at the death of Queen Elizabeth, in 1603, only numbered fifty-six. These were gradually increased to 192 at the death of William III. in 1702, and to 229 at the death of George II. in 1760. Their numbers were rapidly added to in subsequent reigns, until in 1893 the roll of temporal peers—exclusive of twelve minors and one baron whose claim is not yet established—amounted to 534, and adding the number of spiritual peers, made the total number of the members of the House of Lords 560.

714. Which charitable institution in this country has the greatest income yearly?

Among charitable institutions in this country Dr. Barnardo's "Homes for Orphan and Waif Children," established 1866, has the largest yearly income. In 1892 it amounted to £131,576, and in 1893, £132,834. It is maintained entirely by charitable bequests and donations, and has no endowments. The homes, including an adult and evangelistic mission branch, comprise fifty-one distinct institutions, thirty-six in London, one in Jersey, nine in English counties, one in Scotland, and three in Canada. There are many large hospitals in this country which are almost entirely dependent on voluntary contributions. Chief amongst these is the London

Hospital, which has an annual income of £75,265; St. Bartholomew's has £50,000; St. George's, £45,373; St. Thomas's, £40,000; Guy's Hospital, £31,900; Royal Hospital for Incurables, £29,704; Hospital for Consumption and Diseases of the Chest, £27,653. The Society for the Prevention of Cruelty to Children has an income of £39,081, and the Asylum for Idiots' income amounts to £33,164.

715. What is the highest price ever paid for a diamond?

The largest sum actually paid for a precious stone was the £125,000 (two million livres of 1s. 3d. each) given by the Duke of Orleans for the "Pitt" or "Regent" diamond, the stone being now valued at £450,000. Catherine II. of Russia paid not far short of the same amount for the "Orloff" diamond, namely, £90,000 in cash, an annuity of £1,000 a year, and a title of Russian nobility. The Nizam of Hyderabad agreed to give Mr. Jacobs, the famous jeweller at Simla, £430,000 for the "Imperial" diamond, which is now the subject-matter of litigation in India. Another diamond, the "Excelsior," is at present deposited in one of the safes of the Bank of England, and its owners ask a million sterling for it. This valuable precious stone was found in the mines of Jagersfontein, Cape Colony, by Captain Edward Jorganson, the inspector of the mines. Half a million is said to have been offered for it and refused; while the present German Emperor is stated to be desirous of purchasing it if the price could be arranged satisfactorily. The "Braganza" diamond, one of the Crown jewels of Portugal, weighs no less than 1,680 carats, is uncut, and its value has been estimated at about £5,000,000 sterling. There exists, however, some doubt as to whether this uncut stone is a diamond or a white topaz. The "Koh-i-Noor" diamond, in the possession of Her Majesty, is valued at £140,000.

716. Which medal, amongst collectors, is considered the most valuable?

There are several English medals highly valued by collectors on account of their historical associations, but perhaps the most highly prized is that known as the "Blake Victory Medal, No. 1, 1653." This medal, engraved by the famed engraver, T. Simon, is of gold and oval in shape. In 1653, Parliament ordered four of these medals to be struck: two, with chains of £300 value each, were conferred upon Blake and Monk; and two, with chains of £100 value each, were conferred on Penn and Lawson, as a token of their good acceptance of the eminent services performed by them against the Dutch. The medal given to Blake was bought

for William IV. for 150 guineas, and another of these medals was sold at Sotheby's, on May 1st, 1882, for £305. A much-prized medal was that given by the Emperor of Germany, Francis II., to eight officers of the two squadrons of the 15th Light Dragoons for the brilliant charge by them at Villiers-en-Couche, near Cambray, on the 24th of April, 1794. Only nine of these medals were struck, one being deposited in the Imperial Cabinet at Vienna. In 1798 the King (George III.) permitted these medals to be worn. Crosses of the Order of Maria Theresa were subsequently granted to these officers, and permitted to be worn in uniform. One of these medals, which had belonged to Cornet E. G. Butler (afterwards Major-General Sir E. G. Butler), was, in 1887, at a sale by Messrs. Sotheby, Wilkinson, and Hodge, purchased by Colonel Eaton for £240. The gold medal presented to Bishop Juxon by Charles I. was sold lately by the bishop's descendants for £400. It was the only one of its kind struck.

717. Where is the biggest bowling green in this country?

Edinburgh is believed to have the largest bowling greens, and in that city there are at least fourteen clubs, each with its own separate bowling green. Bowls is an essentially northern game, and for every green or bowling club in England there are five or more in Scotland. There are between 350 and 400 recognised clubs in Scotland. Ayrshire has thirty-four clubs, Edinburgh and Midlothian thirty-three, Lanarkshire twenty-seven, Glasgow twenty-three, and Renfrew twenty-two. Within recent years this pastime has become exceedingly popular in Newcastle, where there are eight public greens and three private greens. There is a fine bowling green at Magathay, in the parish of Norton, near Sheffield. The green itself has existed since the year 1681. Several colleges at Oxford and Cambridge have large bowling greens. Trinity College, Cambridge, has one, as also Queen's, Magdalen, and New College, Oxford. Lord Vaux's seat, at Harrowden, and Earl Spencer's, at Althorp, both possess unrivalled bowling greens.

718. Where is the most extensive orchard in Great Britain?

At Toddington, near Winchcomb, in the County of Gloucester, where Lord Sudeley has an orchard of 500 acres in extent, and which, in 1890, yielded its owner a profit of £10,000. The trees are chiefly apples and plums, the latter fruit-trees in the year mentioned yielding 150 tons of plums. The orchards of Great Britain cover 210,000 acres, and the average yearly crop of apples is over 55,000 tons. In 1881 the area was only

185,000 acres. In 1882 the raw fruit imported into this country, exclusive of oranges and lemons, amounted to 5,000,861 bushels, while the quantity in 1892 was 7,387,670 bushels.

719. At which University have most women students matriculated?

The University of St. Andrews has admitted women since 1877, and 6,605 ladies have matriculated. Out of this number 1,223 have received the title and diploma of LL.A., or Lady Literate in Arts. In the matriculation list of the London University of July, 1893, it was shown that 270 ladies had been successful; one woman took the LL.B. degree, whilst four received that of M.D. Six women took the M.B. degree; twelve gained the B.Sc. degree; six took the much-coveted M.A. degree. The B.A. degree was in 1893 conferred on seventy-nine women. At Cambridge University women have been allowed to compete for degrees since October, 1863. Miss Ramsay was senior classic, while Miss Fawcett beat the senior wrangler of her year. At Oxford University, since April 29th, 1884, ladies have been examined for honours, but in neither Oxford nor Cambridge can they proceed to graduation. Melbourne University was thrown open to women on March 22nd, 1880, while the Victoria University, at Manchester, opened its doors to ladies in 1883. At the University of Christiania ladies stand high on the honour lists. At Zurich University, in Switzerland, in 1893, 111 women students matriculated.

720. Have any roadways in Europe ever been laid with mahogany?

The municipal authorities of Paris so laid, by way of experiment, a portion of that almost interminable thoroughfare—La Rue Lafayette—in the French capital. Blocks of Brazilian mahogany of a peculiarly fine texture and colour were laid down in the portion of that roadway which is nearest to the Eastern of France Railway terminus, at a cost of 50f. per square mètre, which is considerably less than £2 sterling per square yard.

721. At whose funeral in this country was the service read and the sermon preached by a girl?

This was done on the occasion of the funeral of an eccentric miller of Highdown Hill, in Sussex, named John Oliver. The remains were interred near his mill, in a tomb he had caused to be erected for that purpose nearly thirty years before his death, the ground having been previously consecrated. The coffin, which he had for many years kept under his bed, was

painted white, and the body was borne to the grave by eight men dressed in white. A girl about twelve years old read the Burial Service, and afterwards on the tomb, delivered a sermon on the occasion, from Micah vii., 5, 8, and 9, before at least two thousand auditors whom curiosity had led to this extraordinary funeral. On the slab cover of the tomb is the inscription following: "For the reception of John Oliver, when deceased to the will of God; granted by William Westbrook Richardson, Esq., 1766." There are various passages of Scripture on different parts of the tomb, and on the south side are the words: "In memory of John Oliver, miller, who departed this life the 22nd of April, 1793, aged 84 years." The miller built a summer-house, in which he could sit musing before his tomb, and at the same time enjoy an extensive view over both land and sea. By his will he left £20 a year for keeping up this tomb and summer retreat.

722. When was the first trial for breach of promise of marriage held in this country?

In the reign of Queen Elizabeth. Until the passing of Lord Hardwicke's Act, in 1753, the Ecclesiastical Court had power to compel a defendant to carry out his agreement with the plaintiff. Among early Chancery proceedings were a considerable number of bills of complaint, grounded on an alleged breach of contract of marriage, some of which date back as far as the middle of the 15th century. The first of these is a complaint preferred to Cardinal Archbishop of Canterbury, Chancellor of England, between the years 1452 and 1454, by Margaret Gardyner and Alice Gardyner (presumably her daughter) against one John Keche, of Yppeswych. The faithless Keche, after receiving ten marks from the said Margaret and twelve marks from the said Alice, went and took to wife one Joan, the daughter of Thomas Bloys. In the countries of Belgium and France there had been no breach of promise trials till quite recently. The first French breach of promise action was tried in 1891 in Béziers, when the plaintiff got a verdict for £150; while in Belgium the first case of the kind occurred in 1893.

723. Has a violin ever been played by electricity?

This has been done by Mr. Frank D. Brown, whose "electric violin" is the latest novelty in the musical line in the United States. Its inventor says: "I attach it to a piano or organ keyboard, and the keys of the instrument are electrically connected with the keyboard, so that when any of the keys on the piano are touched they actuate the violin notes that correspond with notes of similar pitch and tone of the piano or

organ. I can sound either the notes of the piano or violin as I choose, or both at the same time." The inventor then illustrates the method of doing so: "A violinist playing that instrument can ordinarily strike but two strings of the violin simultaneously, while with this device one can strike as many strings of the violin as he can with both hands strike keys and notes of the piano or organ. It will enable the sounding of new chords that it was before impossible to strike with the bow, and these chords will, of course, contain more notes than it has ever before been in the power of the violinist to strike." The inventor contends that new effects and expressions can by his device be obtained from the violin, which will more than ever charm and entrance its hearers. The same gentleman is engaged also in another invention, which is intended to "hitch on" an entire orchestra to the pianoforte keyboard in the same manner.

724. Who is the tallest living actor on the British stage?

This undoubtedly is Mr. Fritz Rimma, who played the character of Sergeant Caramel in the well-known comic opera, "The Old Guard," and who stands about 6ft. 4in. in height. Mr. Herbert Beerbohm Tree, of the Haymarket, and Mr. Charles Collette, the comedian, are both over 6ft. in height. Henry Irving and Edward Terry are each 5ft. 10in. in height; William Terriss, 5ft. 9in.; George Grossmith and Hermann Vezin, each 5ft. 6in.; and J. L. Toole and John Hare, each 5ft. 5in. in stature.

725. What is the youngest age at which a barrister has been made a Q.C.?

Francis Bacon, afterwards Lord Chancellor, Baron Verulam, and Viscount St. Albans, better known as Lord Bacon, and celebrated chiefly for his philosophical writings, was born in 1561; was called to the Bar at the age of twenty-one; and was appointed by Queen Elizabeth the first Queen's Counsel, or Counsel Extraordinary to the Queen, in 1590, when he was twenty-nine years of age. Thomas Erskine, who was born in 1748, after a short service as midshipman in the Navy, and as an ensign in the First Regiment of Foot, commenced his study for the law in 1775, entering as a student of Lincoln's Inn. He was called to the Bar in Trinity Term, 1778, and so rapid was his success that in 1783, when he had scarcely been five years at the Bar, he was made a Q.C. before he had attained the age of thirty-five. Sir Richard Everard Webster, M.P. for the Isle of Wight, was made a Q.C. at an almost equally early age. Born in 1842, he was called to the Bar (Lincoln's Inn) in 1868, when he rapidly achieved a reputation for his conduct of

engineering, patent, shipping, and railway cases. He was made a Q.C. in 1878, before attaining the age of thirty-six. Lord Selborne was made Q.C. when thirty-seven years of age; Sir Charles Russell at thirty-nine; Sir John Gorst at forty; Lord Coleridge at forty; Sir Henry James at forty-one; Right Hon. Henry Matthews and Sir H. Hawkins at forty-two; and Lord Esher at forty-three.

726. What bridge in this country has the steepest gradients on each side?

The bridge at Dumcrieff, in Dumfriesshire, which has gradients on each side of about one in eight, and is said to be the most extraordinary structure of the kind in the country. The footbridge with the steepest gradients on each side is the famous Gothic triangular bridge at Crowland, or Croyland, in Lincolnshire, which has a stranded appearance, in consequence of the streams which it was built to cross being now conveyed underground. Its three steep half-arches meet in the centre, and are climbed by rough steps. On the south side sits a weather-beaten figure, crowned, and holding what seems to be a globe or mund in the right hand. Carrying out the Trinitarian idea, each pier of the bridge was said when it was built to stand in a different county—one in Lincoln, the second in Cambridge, and the third in Northampton.

727. What is the amount of the highest damages ever awarded in a libel case?

Ten thousand pounds is the highest amount of pecuniary damages ever awarded in this country in a case of libel. This sum has been awarded more than once, but in some cases the Courts on appeal have subsequently reduced the amount given by the jury. In "Weldon *versus* Gounod," £10,000 was, in May, 1885, awarded the plaintiff as damages for libel. A similar amount was awarded in January, 1885, against Mr. Irving Bishop, but was reduced to £500 on appeal. Imprisonment is sometimes given in lieu of or in addition to a pecuniary penalty. In 1633, William Prynne, a Puritan lawyer, for a libel on the Queen was fined £5,000, placed in the pillory, and had his ears cut off. In March, 1885, Mrs. Georgina Weldon was sentenced to six months' imprisonment for a libel on M. Jules Prudence Rivière. In the great racing libel case, Sir George Chetwynd in his action against the Earl of Durham claimed £20,000 as damages, and got one farthing. The late Charles Stewart Parnell, in his libel action against Walter and another (the 'Times') for libel, claimed £100,000, and eventually got a verdict by agreement for £5,000.

728. Who is the youngest railway conductor in the world?

The youngest person in the world who has acted as a railway conductor is a girl of the age of twelve, the daughter of a railway conductor on one of the United States railways. Her father met with an accident, and his daughter, who had been in the habit of travelling with him in his railway journeyings for two or three years previously, at once took his place and fulfilled the duties of the position to the satisfaction of the company. An American railway can also boast of the youngest boy conductor in the world. Master John C. Barnum is thirteen years of age, and was born in New York, but has resided in Oregon for the past nine years. His home is in Medford, Jackson County, on the Southern Pacific. On January 20, 1893, his father leased the Rogue River Valley Railroad, which runs from Medford to Jacksonville, a distance of five miles, and, as its revenues are light, he took charge of the engine and placed his son on the train as conductor. He wears the conventional cap and uniform, with lettered brass buttons, and carries a punch.

729. What is the highest price ever paid for a violin bow?

The highest price publicly recorded that has ever been paid for a violin bow was for one made by François Tourte, of Paris (1747-1835), the greatest bow-maker who ever lived, and fifty guineas was the sum paid for it by the Joachim Presentation Fund Committee. This bow was given to the great virtuoso. The highest price recorded in the auction-room was given by Mr. Alfred Ebsworth Hill, at the Hotel Drouot, in Paris, in February, 1887. The bow he then purchased was likewise made by François Tourte, and was knocked down to him at 1,100fr. (£44).

730. Where is the smallest University in the world?

At Foura Bay, Sierra Leone, where there is an English University with twelve students and five instructors. This University is, according to Dr. Kukula, who in his "Year-book of the Universities of the World" enumerates 147 of these institutions, the smallest concern of the kind in the world. In the United States there are a number of small Universities. The smallest of these, in the number of its students, is the National American University of the Roman Catholic Church, situate in Washington, in the District of Columbia. This University was organized in 1889, is confined strictly to post-graduate work, and in 1892 was returned as having sixteen instructors and thirty-three students,

and a library of 20,000 volumes. In Vermont, the smallest of the States, the Norwich University is returned as having thirteen instructors and fifty-six students; while the Universities in Montana, Wyoming, and Delaware are credited with eighty, eighty, and eighty-two students respectively. The smallest University in Europe is that of Rostock, the most important town of Mecklenburg-Schwerin, with its forty instructors and 360 students. Its library contains 140,000 volumes, and it has an observatory and an experimental agricultural colony.

731. What is the number of packets of sweets sold every year by automatic machines at British railway stations?

Between fifteen and sixteen millions. There are over 3,000 automatic machines for dispensing sweets in British railway stations, paying a rental of between £7,000 and £8,000 a year for the space they occupy. The machines in 1891 delivered 151½ tons in 6,794,810 packets of chocolate and 151 tons in 5,127,594 packets of other sweets, or in all 302½ tons in 11,922,404, or very nearly 12,000,000, packets; while in 1893 the sales had increased to nearly 400 tons—168 tons of chocolate and 226 tons of other sweets—in 15,240,960 packets.

732. When was the "blast" furnace first used?

On the Egyptian tombs at Thebes metal-workers are represented as using the blow-pipe more than 2,000 years before Christ, and Indian and other Oriental workers in metals still use a primitive bellows for this purpose, which was the germ of the blast furnace. Roman historians say that iron was employed by the Britons in manufacturing spears and lances, which required some sort of blast. The Romans themselves, when they occupied Britain, employed iron to a considerable extent, as is evidenced by cinder heaps in the Forest of Dean, in Gloucestershire, and elsewhere. But so rude was their process, that those heaps in the Forest of Dean furnished the chief supply of ore for twenty furnaces during 200 or 300 years. The English ironfounders who employed these remains melted them in furnaces of a simple form, called "air-bloomeries," which they erected on the tops of hills, in order to obtain the greatest possible blast of wind. Subsequently these furnaces were enlarged and supplied with artificial blasts. Blowing machines, in which large cylinders were used, were erected by Mr. John Smeaton, the eminent civil engineer, at the Carron Iron Works, in 1760. One, equal to the supply of air for forty forge fires, was erected in the Royal Dockyard at Woolwich. The invention of the hot-blast

furnace, as presently used, is credited to Neilson, a Scottish engineer, who obtained his patent in 1828. The honour of this invention, however, has also been claimed for another engineer, Mr. James Carmichael, to whom a bronze statue has been erected in the Albert Institute grounds at Dundee.

733. Is there any place in the world where workers—man, woman, or child—receive the same rate of payment?

Such a place exists on the Pacific Coast, at the head of the Harbour of Topolobampo, where a colony of Americans have been settled for the last eight years, converting the dream of Socialists into accomplished facts. Throughout the colony's experience the central idea under which it was organized has not been forgotten. Co-operation has ruled. Every pound of grain or fruit raised has been turned into a common fund, presided over by a director. Each labourer—man, woman, or child—working in the ditch, on the ranch, or on the truck farm of La Loggia, a 400-acre track near the river, has received payment in company script, three credits, or three dollars a day. The script is receivable for material from the company's storehouse, which has, by means of the farm's produce, the sale of stock to northern investors, and contributions from friends, usually been fairly well filled. Originally four hundred colonists started for this station, but about half of them soon returned home, discouraged and disheartened. In the fall of 1890 two hundred more went out to the front, afterwards followed by others, and now the colony consists of between five and six hundred; women and children embracing 40 per cent. of the colony's strength.

734. In which country are photographers licensed?

In Russia, where even the license is little or no protection to anyone who incurs the suspicion or hostility of any of the officials. In Turkey things are very little better, as a photographer found to his cost, not long since, when he attempted to obtain an instantaneous photograph of the Sultan on his road to the mosque. His apparatus was smashed, whilst he, after being kept in prison for three weeks, was unceremoniously hustled out of the country. In France photographers cannot carry on outside work except at great risks, as there seems to be an ingrained suspicion and hostility against any person using a camera, that they are engaged in spying or other hostile purpose. An International Bureau of Photography was formed in 1893 at Chicago, one of its objects being to obtain the official recognition of photography by the Governments (local as well as central) of civilized nations.

735. How many schools adopt the stamp deposit system in connection with the Post Office Savings Bank?

By an invention of the late Mr. George Chetwynd, C.B., first Controller of the Post Office Savings Bank, whereas a shilling had been the lowest sum that could be deposited, pennies could be saved by using one of the now well-known penny postage stamp saving slips; and when twelve of these penny stamps have been affixed to one of these slips, which can be obtained at any post-office, they will be accepted by the Post Office as a shilling deposit, provided they have not been in any way defaced or damaged. When the Free Education Act came into operation it was desired that some part of the fees hitherto paid by parents should be invested by the children in the Post Office Savings Bank by means of this system of stamp slips. During the year 1892 no fewer than 1,900 schools adopted this system, and 466,000 one-shilling and 103,000 four-shilling forms were supplied. This scheme greatly stimulated the formation of school penny banks also, and from September 1st, 1891, till December 31st, 1892, as many as 3,300 such banks were constituted, whereas only 336 were opened in the first sixteen months. The Post Office now offers cards as alternative to the penny bank books, and there has been a large demand for the former. A clerk to a School Board in an important town in Wales, where the stamp deposit system is in operation, stated that £1,200 had been saved by the scholars in 1893. The total number of depositors in the Post Office Savings Bank, as given in the report, is 5,452,316, distributed as follows: England and Wales, 5,027,431; Scotland, 199,062; and Ireland, 225,823.

736. Do many London business firms engage the services of a chaplain and have a regular daily service?

For a great many years past some London firms have had chaplains and regular daily services. Among them are Messrs. Hitchcock, Williams, and Co., warehousemen, of St. Paul's Churchyard and Paternoster Row; Copestake, Lindsay, Crampton, and Co., lace manufacturers and warehousemen, of Bow Churchyard, Cheapside, Bread Street, and Star Court, of which firm the late George Moore, whose memoirs were written by Samuel Smiles, was such a prominent member; Price's Patent Candle Company, at the Belmont Works, Battersea, and 31, Threadneedle Street; whilst the Rev. E. A. Stuart, M.A., frequently used to conduct services at a large draper's establishment in the North of London. Copestake, Moore, and Crampton started a similar service with a chaplain at their lace manufactory in Nottingham. Thomas Adams, lace

manufacturer, of Stoney Street, in that town, commenced the same at least forty years ago, having an apartment in the warehouse furnished as a chapel. In his factory in the neighbourhood of the same town a similar service with another chaplain was commenced. Mr. Adams died many years ago, but on turning his business over to a limited liability company, he secured the continuance of these services by the trust-deeds.

737. Which bird can spend most time in the air without perching?

The frigate-bird. Mr. J. Lancaster, an American naturalist, who spent five years on the west coast of Florida, in studying the habits of aquatic and other birds, states that the frigate-bird can live in the air for a week at a time, night and day, without once perching or touching a roost. He timed these birds, and found them able to go at the rate of 100 miles an hour with ease, and that on fixed wings. In Mr. Lancaster's opinion, these birds up to that speed could fly just as fast as they pleased. The wings of the frigate-bird stretch to an expanse of about 10ft. or 12ft., and it passes so much of its time in the air, that it has been credited with sleeping on the wing. The albatross has followed the course of a ship for many days without being known to rest. This bird may be termed the monarch of the high seas. It exceeds the swan in size, attains a weight of from 12lb. to 28lb., and extends its wings from 10ft. to 13ft. One remarkably large bird, shot off the Cape of Good Hope, measured 17½ft. from wing to wing. The swift is another bird almost continually on the wing, and never settles on the ground or on trees. It lives more in the air than any other bird; eating, drinking, and even collecting materials for its nest while on the wing.

738. Was a Treasury cheque for school grant ever dishonoured?

This happened in 1893 with a Treasury cheque which had been forwarded to the Dundee School Board for school grant duly earned. The cheque, for £1,273 17s. 6d., was paid into the bank to the credit of the School Board, but when it reached the Bank of England it was dishonoured. This, to say the least of it, was a most high-handed and unnecessarily aggravating way of dealing with the local school authority, and the only explanation vouchsafed to the School Board after the cheque had been stopped was that the amount had been wrongly calculated. The Department, however, proved to be in the wrong, and about three months after the dishonouring of the cheque, a letter was sent to the Dundee School Board stating that: "My lords have been informed that the law

officers have given their opinion that the grant in relief of fees need not be taken into consideration in calculating the average fee for the purpose of Article 6, and they have accordingly removed the suspension from the order for £1,273 17s. 6d., which was sent to you in payment of annual grant for the school."

739. Which quadruped has the most variously coloured skin?

The mandril. The colours of the rainbow are emblazoned on this creature's form. A bright azure glows on each side of its nose; the nostrils are deeply grooved, and the ridges are bedizened with blue. Lines of brilliant scarlet and deep purple alternate with the blue, and the extremity of the muzzle blazes with a fiery red like Bardolph's nose. The end of the mandril's back is also radiant with chromatic effect, being plenteously charged with a ruddy violet. The general colour of the fur is of an olive-brown tint, fading into grey on the under side of the limbs, and the chin is decorated with a small, yellow, pointed beard. The ears are small, of a black colour with a tinge of blue. The Mexican wolf is the most variously coloured of all wolves. Its head is ash-coloured, striped with dusky lines. The body is ash-coloured, spotted with black; its belly is cinerous; the tail is cinerous, tinged in the middle with tawny. The legs and feet are striped with black and ash colour; and between the ears are broad, tawny spots. Grey and white are also found on some parts of the body. One of the quadrumanous tribe—the varied monkey—has a great variety of colours: its face is of a dark lead colour, the beard on each side long and of a greenish yellow; the top of the head is bright yellow freckled with black; back and sides deep brown with black freckles; legs, feet, and tail black.

740. Which shipwrecked vessel carried the most valuable cargo?

In a storm off Lewis, U.S., in 1798, the British frigate *De Brook* was lost, having on board no less than £2,400,000 worth of specie and jewels, taken from an intercepted Spanish fleet while on her voyage to Halifax. The British war vessel *Hussar*, which was wrecked in attempting to make the passage through Hell Gate, New York, in 1780, had on board treasure, mostly in guineas, to the value of £960,000, which would make the value of her entire cargo considerably more than a million sterling. The obstructions causing danger at Hell Gate were in 1885 removed by an enormous blasting operation. By the wreck of the French frigate *Lutine*,

in 1799, a loss of nearly a million sterling took place, and the whole crew were drowned, except one man. Some small portion of the bullion was afterwards recovered. The screw steamer *Royal Charter*, wrecked off Moelfre, on the Anglesey coast, in October, 1859, had gold on board as part of her cargo to the value of between £700,000 and £800,000, much of which has since been recovered. The French war vessel *L'Orient*, sunk in Aboukir Bay at the Battle of the Nile in 1798, had treasure on board equivalent to £600,000 in value. In the storm which raged November 14th, 1854, in the Black Sea, the steamer *Prince* was lost, with 144 lives and a cargo worth £500,000 indispensable to the sufferers in the army at the Crimea. The steamer *Amalia* was wrecked while carrying a cargo worth £200,000. The route from England to India is strewn with treasure of vessels lost on the road, the estimated value whereof is not less than eighty millions sterling.

741. Does the honorary freedom of any English borough confer a kissing privilege upon its possessor?

That of the ancient borough of Rye, in Sussex, one of the Cinque Ports, does so. By one of the early charters, which had long been overlooked, but which was brought to light again not long ago by a searcher amongst its ancient records, the possessor of the honorary freedom of this small but distinguished borough secures the right and privilege of kissing the mayoress. At Hungerford, in connection with the festivities of Hocktide, there are two officials known as "tuth men," who have the privilege of taking a kiss from each member of the fair sex. They are appointed annually by the chief constable, who is head man of the commoners.

742. Was there ever a public-house or inn where a customer could not get two consecutive drinks?

This was the case at a public-house in Bishopsgate, London, known as "Dirty Dick's." Dick, the original proprietor, being jilted by his intended bride on the morning of the wedding day, made a vow that the table, as set for the wedding breakfast, should remain undisturbed as long as he lived, and that from that day forward he would never wash or tidy himself again, which vow he religiously kept for the remainder of his life, and earned for himself in consequence the title of "Dirty Dick." Another of his peculiarities was that he would not allow a customer to be served with drinks twice at the same visit. If requiring more, the customer was obliged to leave the house and return before he could have a further drink, which custom continued

to be observed for many decades after the death of the eccentric proprietor. A similar custom is also observed in several of the public-houses belonging to Messrs. William Teacher and Sons, Glasgow. This firm have in all about a score of public-houses throughout Glasgow. In several of them beer and spirits must be carried out, no drinking being allowed on the premises; in others, customers are supplied only at the counter, there being no sitting-rooms. In the latter shops, a placard is displayed inside, intimating that no customer will be supplied with more than one glass of spirits or one pint of beer on any one visit, an interval of at least two hours to elapse between each refreshment to this extent supplied. This rule is rigidly adhered to in the whole of the firm's houses where goods are sold for consumption on the premises.

743. How many London cabdrivers are over seventy years of age?

One hundred and fifty-two. It appears from the report of Sir Edward Bradford, issued in 1893, that there are no fewer than 917 cabdrivers in London who are between sixty and seventy years of age, 151 between seventy and eighty, and one, a venerable patriarch of about ninety years of age, still holds a license. There are also in London 118 omnibus-drivers over sixty, and of these eighteen are upwards of seventy years of age. London contains 15,011 cabdrivers and 6,517 omnibus and car drivers. There are 45,000 cabs throughout the United Kingdom—London alone has 12,000, earning nearly £3,000,000 sterling annually—the earnings of the whole being estimated at £8,200,000 yearly. About £8,000 per day is spent in London on cab fares. There are in London for the convenience of the cabmen forty-one cab shelters, patronized daily by some 4,000 cabdrivers.

744. Which newspaper in this country was published at the highest price?

The 'Hamilton Herald,' Lanarkshire, a few copies of which are every week printed on cloth, at 1s. 6d. per copy, is probably the newspaper published at the highest price in this country. This weekly is published every Friday, printed on paper, at 1d., but the enterprising proprietors print a number of cloth copies each week, one of which is presented to every advertiser of a birth, marriage, or death. In this way advertisers can preserve their announcements indefinitely. These cloth copies can be obtained by any person wishing one for 1s. 6d. each. The 'Hamilton Herald' claims to be the only newspaper in the world that has introduced this novel feature.

The 'John Bull,' a weekly newspaper, was published at 1s. each copy. It was founded in 1820 and continued till 1892, in which year its publication ceased. The London daily newspapers were, in olden days, published at prices ranging from 3d. to 7d., the latter price being charged for the daily copy when the tax on newspapers was at its maximum of 4d. per copy. The prices of most of them were only reduced to 1d. after the newspaper tax had been abolished and the paper duty removed. The highest-priced daily newspaper in this country at the present time is the London 'Times,' at 3d. per copy.

745. Were public reading-rooms ever held to be illegal in this country?

In September, 1790, a case was tried at Bow Street, in which it was decided that public newspaper reading-rooms were illegal. Three proprietors of such institutions were prosecuted by the Stamp Office authorities, and were each fined £5 for allowing the use of their rooms and newspapers to the public on payment of 1d. for admission. The case was reported in the 'Times' of the 6th of September, 1790.

746. Is the left arm stronger than the right?

Frequently this is so. In the very elaborate report on the work of the Anthropometric Laboratory, presented to the British Association in 1893, it was set forth that in males the right arm was the stronger in 50·9 per cent., or in rather more than half of the cases examined; the two arms were equal in 16·4 per cent.; and the left arm was the stronger in 32·7 per cent., or in nearly one-third of the cases examined. In females the right arm was stronger in 46·9 per cent.; both arms were equal in 28·6 per cent.; and in 24·5 per cent., or nearly one-fourth of the cases examined, the left arm was found to be stronger than the right.

747. Why are italics so frequently used in the English version of the Bible?

The idiomatic construction of the English language differs considerably from that of Hebrew and Greek, in which the Bible was first written. A literal translation very often makes clumsy reading, and the English translators wisely determined to make the English version of the Bible a model of literary style as well as linguistic accuracy. The words in italics in the Bible, therefore, have no corresponding words in the original; but the translators have themselves supplied these words to render the sense of the passages in which they occur, in their opinion, more full and clear. The authorized version was

prepared in the reign of James I. Fifty-four scholars, most distinguished for learning, were selected for the work, and finally forty-seven undertook it. They were divided into six Companies, to each of which a certain portion of Scripture was assigned. Each person of a Company was to prepare a translation of the whole portion committed to that Company. When a Company had in this way agreed upon their version, it was to be transmitted to each of the other Companies, so that no part was to be without the sanction of the whole body. Two Companies sat at Westminster, two at Oxford, and two at Cambridge. The final revision of the whole was conducted in London by two delegates from each Company. The work of translation and revision occupied from 1607 to 1610, and it came from the press of Robert Barker in 1611. The first book printed with italics was an edition of "Virgil," issued at Venice, by Aldo, in 1501; a copy of this book is preserved in the British Museum.

748. What is the greatest number of times a pear-tree in this country has fruited in one season?

Four times. The year 1893 was a prolific one for fruits of all kinds in this country, and a pear-tree planted by Mr. Henry Port Aslatt, of Southampton, bloomed and fruited four different times during that season: the pears of all four growths being luscious and well-developed fruit, and gathered in first-rate condition. An apple-tree in the orchard of Mr. Reeve, of Mill Road, Cambridge, in August, 1893, after having yielded two distinct crops, was in blossom for the third time; while numerous cases of second crops of both apples and pears were reported in the course of that year. At Vine Farm, West Derby, there were two distinct crops of strawberries yielded in 1893, the second crop being unusually late in the year for this fruit to be seen growing.

749. What is the highest price ever paid for a box at the theatre?

Five hundred pounds was paid by the Shah of Persia when he visited the Theatre Royal, Drury Lane, London, in 1873. Two hundred and fifty pounds was paid at Buenos Ayres, in South America, on the visit of Mme. Patti, in 1888. On that tour this famous singer obtained £70,000 for twenty-four performances, as in addition to a guaranteed minimum of £1,000 for each performance, she was to receive a certain proportion of all profits. A thousand dollars, or about £200, was the sum given by Miss Agnes Booth-Schœffel for a box at Abbey's Theatre, New York, on the occasion of the first performance

of "Becket" by Mr. Henry Irving and his company on their American tour in November, 1893. Two smaller boxes were on that occasion sold for 300dols. (about £60 each); while another box, less favourably placed in the theatre, realized 100dols.

750. Was an organ ever erected specially for a wedding and removed after the ceremony?

This was done on the occasion of the marriage of Miss Ida Mayer (daughter of Mr. Alphonse Mayer) with Mr. Stuart Montagu Samuel (a partner in the banking-house of Samuel Montagu and Co.), which took place on April 10th, 1893, at the new West-end Synagogue, Bayswater. The ceremony was performed by the Rev. S. Singer, assisted by the Revs. E. Spero and John Harris. It was a "white" wedding. The ark was embowered in palms and white-flowering plants, while the marriage canopy was in white satin heavily festooned with white flowers. The whole of the interior of the building was similarly ornamented. The service was choral, the choir having been largely augmented for the occasion, and the orchestra consisted of violins, double bassos, and harps. The organ had been specially erected for the occasion, and was removed after the ceremony, as it is contrary to Jewish usage in orthodox congregations to employ the organ or other musical instruments except at weddings. In fact, the above marriage was the first orthodox Jewish wedding in London where they have been used with the approval of the Chief Rabbi.

751. What is the greatest age at which anyone has competed for a University degree?

Seventy-six, this being the age at which a persevering student at Shanghai, who had failed in every examination since he was twenty, won a University degree of considerable distinction in 1892. The ordeal for degrees in China is a severe one, divided into three bouts of about thirty-six hours, two nights and a day each, with intervals of a day. Three weeks of anxious waiting ensues before the examination lists are published. The candidates during the examination are shut up in cells a few feet square, containing one board for a seat and another for a desk, the doors being locked from the outside. Each row of cells has two attendants for cooking, etc., attached to it, and the number of candidates under lock and key generally exceeds ten thousand. More degrees are taken at Cambridge in later life, perhaps, than in any other English University. Persons going up late are there able to enter as Fellow Commoners, and this enables them to associate with men of their own age. Instances of students taking a B.A. degree between

the ages of forty-five and fifty have been known. A gentleman named William Brown Keer took his degrees of B.A. and M.A. at Oxford at the same time, in 1890, having kept sufficient terms for both. As he was ordained deacon in 1858, he must have been at least fifty-five when he graduated. In Germany there are 21 Universities, Italy 21, United Kingdom 11, Austria 10, Spain 10, Russia 8, Belgium, Holland, and Switzerland 4 each. In the whole of Europe there are 101 Universities, with 6,274 professors and 123,690 students.

752. Which British Cathedral has the largest library?

That at Durham, which now contains over 15,000 volumes. The library in which they are placed is a magnificent chamber, finished in 1404, 194ft. long and 41ft. wide, and is still covered with its original solid and massive roof of oak trunks, scarcely touched by the axe. In the library of St. Paul's Cathedral, which is a noble room, lined with oak shelves, and surrounded by a gallery supported by brackets carved by Grinling Gibbons, there are 10,500 volumes of printed books, besides rather more than an equal number of separate pamphlets. The library at York contains about 11,000 volumes; that at Canterbury about 9,900 printed books, with about 110 MS. volumes, and between 6,000 and 7,000 documents. The library of Exeter Cathedral contains 8,000 printed volumes, and some most valuable MSS.; Lincoln Cathedral has a library of 4,500 printed volumes, and a large number of MSS.; the library of Gloucester Cathedral is a large apartment, 72ft. long, 33ft. wide, and 31ft. high, and contains a good collection of books; Wells Cathedral library contains 3,000 volumes; and that of Hereford 2,000 volumes, many of which are chained and of great value. In this library is a remarkable map of the world, the work of a certain Richard of Haldingham, about 1314—one of the most valuable relics of mediæval geography.

753. Where is the largest private park in England?

In the neighbourhood of Tunbridge Wells, in Sussex, where the park surrounding Eridge Castle, the seat of the Earl of Abergavenny, contains 7,000 acres, or nearly eleven square miles. It includes Saxonbury Hill, with its ancient circular entrenchment, and a prospect tower commanding an extensive and magnificent view. The park of Lord Egerton of Tatton, in Cheshire, is eleven miles in circumference, and is well stocked with red and fallow deer. The park surrounding Arundel Castle, Sussex, is seven miles in circumference, contains many hundreds of deer, and affords rich scenes and beautiful prospects. Eastwell Park, the seat of the Earl of Winchilsea, contains 2,500 acres, and is most varied in

its aspects, with some of the finest scenery in the kingdom. Chillingham Park, in the county of Northumberland, the seat of the Earl of Tankerville, is famed for its herd of wild cattle, for a long time the only herd in this country. Welbeck Park, belonging to the Duke of Portland, is ten miles in circumference, and contains forty-one lodges and many notable old trees.

754. Has a criminal ever been reprieved on the scaffold?

Francis de Rochechouert, Chevalier de Jars, a French officer, was saved from death by a reprieve which arrived when he was on the scaffold. He had been arrested and confined in the Bastille, in 1633, and after eleven months' close confinement, during which he was examined eighty times, he was sent to Troyes, and condemned. He mounted the scaffold, but a reprieve was announced while his head lay on the block; upon which he was conveyed back to prison, where he continued for some time in a state of insensibility. He lived to play a part in the wars of the Fronde, and died about 1660. Another instance occurred about thirty years ago at the convict prison at Waldheim, in Saxony, in the case of a prisoner named Kuenschner, who had been condemned to death for the murder of a shopkeeper at Leipsic, and was one of the most dramatic instances of reprieve on the scaffold ever recorded. Kuenschner was actually on the scaffold, and the knife was about to fall, when a messenger arrived bringing a telegram of reprieve from King John. In 1758, fifteen sailors were condemned to death in Portsmouth for mutiny, because they had simply complained of the quality of their provisions. The halters were being fixed when they were informed that His Majesty had shown mercy on fourteen; lots were drawn to decide who should be the sufferer. The second man drew the unfortunate chance, and was run up to the yardarm.

755. Where is the largest monumental cross in the world?

California possesses the largest cross in existence. It is a beautiful Iona cross, known as the "Prayer Book Cross," and stands in the "Golden Gate Park." It is commemorative of the first Christian service which took place in the United States, which was in the year 1579. The cross is 57ft. high, standing on a pedestal 17ft. 6in. square and 7ft. high, which is composed of sixty-eight pieces of stone, the aggregate weight being nearly 60,000lb. The arms are formed of eight pieces, each weighing 24,000lb., making in all 192,000lb. There are ten stones in this cross larger than the largest stone in the famous

pyramid of Cheops. The material is a blue native sandstone. It was the gift of the late George Child, of Philadelphia. In Princes Street, Edinburgh, stands the Scott Monument, 200ft. in height, in the form of a Gothic cross, the noblest example of that style ever reared. It is an elaborate structure, consisting of a pile of arches diminishing in size towards the top, with fifty-six niches for the statues of some of the chief characters in the stories of the great novelist. Another fine example of a monumental cross is the National Albert Memorial, in Kensington Gardens. The design, by Mr. (now Sir) G. G. Scott, is based on that of the Eleanor Cross.

756. In what country were wheelbarrows carried on the head?

This is still the custom in various parts of the East and West Indies. During the unfortunate construction of the still uncompleted Panama Canal, it was no unusual sight to see long processions of dusky coolies from the East and West Indies with small wheelbarrows filled with earth borne on the tops of their heads. Among the Fantees who live along the West Coast of Africa, and chiefly at Cape Coast Castle, every burden is borne on the head. It is related that upon one occasion a contractor for masonry work about Cape Coast Castle introduced wheelbarrows. The Fantee labourers simply put one stone into each wheelbarrow, and then hoisted stone and barrow both on their heads and trotted off.

757. Which English playwright has made the largest fortune?

William Schwenk Gilbert, who came into note as a playwright on production of his pieces "Palace of Truth" and "Pygmalion and Galatea" (1870–71). The latter of these two pieces is reckoned one of the most valuable literary properties in the world, and is estimated to have produced its author, up to the close of 1893, no less than £40,000. When Mary Anderson was acting in "Pygmalion and Galatea," at the Lyceum, four of Mr. Gilbert's plays were running simultaneously in London alone, and bringing him in £120 every night of their performance. The work of Mr. Gilbert, as a playwright, includes dramas, burlesques, comedies, fairy comedies, and operas. It was in connection with these last that Sir Arthur Sullivan, the composer, and Mr. Gilbert joined forces under Mr. D'Oyley Carte's management at the Savoy. His income during the period of the famous triumvirate from the Savoy alone was £12,000 a year, and that was but a fraction of his earnings, as his plays proved exceedingly popular not only in London, but in the various theatres throughout

the kingdom, as also in those in America and the British Colonies. Mr. H. A. Jones's fees from "The Dancing Girl" amounted at one time to £200 per week. Mr. Pinero made £40,000 by "Sweet Lavender," and a similar amount was made by Mr. Hawtrey from "The Private Secretary." Mr. George R. Sims, for the London rights of one piece alone, received during a period of ten years £4,357; for the provincial rights, £6,720; while America contributed over £12,000, and Australia £600; altogether close on £25,000. Mr. Sims is said to have cleared £15,000 in 1886 as his rights in "Harbour Lights," at the Adelphi.

758. Was the playing of football ever regarded as a crime in this country?

The game of football was known in England prior to 1175, but it was never regarded with favour by the law, and in the reign of Edward III. (1365) an Act was passed forbidding it. During the reign of Richard II. (1388) a similar law was enacted; and again, under the Scottish Kings, James I. (1424) and II. (1457), it was "decreeted and ordained that the foote-ball and golfe be utterly cryed down and not to be used." In 1471 James III. and in 1491 James IV. passed similar statutes. James I. of England also opposed it in his "Basilikon Doron." He writes: "From this Court I debarre all rough and violent exercises, as the football, meeter for lameing than making able the users thereof." And in the reign of Elizabeth, his predecessor, a true bill was found against sixteen persons for playing the unlawful game.

759. In which part of the world does a sham fight always accompany a marriage ceremony?

Dalton mentions that among the Kols of Central India, when the price of a girl has been arranged, the bridegroom and a large party of his friends, of both sexes, enter with much singing and dancing, and sham fighting, into the village of the bride, where they meet the bride's party and are hospitably entertained. Occasionally a few of the young man's friends assemble outside the fields where the women are at work, and rush on them to capture the girl he has fixed on, carrying her off from among the labourers, though a defeat and rescue are not uncommon. Among the Kalmucks, a traveller tells us that after the price of the girl has been duly agreed on, when the bridegroom comes with his friends to carry off his bride, a sham resistance is always made by the people of her camp, in spite of which she fails not to be borne away on a richly-caparisoned horse, with loud shouts and *feu-de-joie*.

760. Which church in this country has a nave formed of half-trunks of oaks set upright?

That of Greenstead, or Greenstead-Ongar, in Essex, which is one of the most ancient churches in England. The nave of this church is extremely curious, being composed of the half-trunks of oaks set upright and close to one another. The trunks, about 1½ft. in diameter, have been split through the centre and roughly hewn at each end to let them into a sill at the bottom and into a plank at the top, where they are fastened by wooden pegs. The nave is 29ft. 9in. long by 14ft. wide, and is believed to have been erected about 1013 as a shrine for the reception of the body of St. Edmund, King and martyr.

761. What is the size of the smallest electric lamp ever made?

About the size of a pea. Electric lamps of this diminutive size have been used in medical diagnosis. One perfected by Dr. Phillips gives a light of four candles, and its use was shown by him in 1893 in the course of some of his experiments. Darkening the room, he placed the lamp in his mouth, so that his lips rested on a rubber socket, and turned on the current. The result was as if a strong light had been placed behind a thin canvas, upon which was painted a man's face. The light shone through the cheeks, rendering every vein perceptible. By moving the lamp about the interior of the mouth, every part of the face could be illumined. The light would creep up as far as the eyebrows, and by resting the lamp against the gums the outlines of the teeth in the gums were plainly visible. The lamp can be used to examine any portion of the body that is accessible. Even the stomach can be examined by the aid of one of these small lamps, some of which are of greater power. Dr. Phillips has by one of them explored the cavities of the eye. Diminutive lamps of this kind have been utilized by photographers in the dark room, the lamps being shielded by a reflector; whilst a German electrician is said to have attached miniature incandescent lamps to the points of skates.

762. Has the Queen ever been present at the "Derby"?

Yes, on two occasions, in 1831 and 1840. The first time, in 1831, she was present as Princess Victoria, seated in an open carriage with the Duchess of Kent. The second visit to the "Derby" was made in 1840, the year of Her Majesty's marriage, accompanied by the Prince Consort, and they witnessed the race from the Grand Stand, the winning horse being "Little Wonder." The chroniclers of that period

recorded the fact that, owing to some carelessness on the caterer's part, no bread was forthcoming at lunch; and on that one occasion at least our Queen was actually in want of a piece of bread. The Prince Consort presented Macdonald, the rider of the winning horse, with his own riding-whip after the race, as a mark of recognition of his admirable jockeyship.

763. What breed of sheep in this country has realized the largest price?

The Shropshire breed, which, in 1893, acknowledged to be a year of unprecedented depression, realized prices higher than had ever before been obtained. The Secretary of the Shropshire Sheep Breeders' Association and Stock Book Society sent out a statement in September, 1893, showing the prices realized on the sale by auction during the previous month of eight rams of this breed, which were £110 5s., £183 15s., £210, £262 10s., £183 15s., £147, £115 10s., and £199 10s., or £1,412 5s. for the eight sheep, giving an average price per head of £176 10s. 7½d. These prices are believed to be unapproached by the records of any other English breed of sheep. In 1891 there was paid for a Merino at Sydney the great price of £1,155.

764. What is the size of the smallest full-grown elephant on record?

A dwarf elephant, named "Lili," from Sumatra, which was exhibited by Mr. Hagenbeck, in Berlin, about a year or two since, stood 36in. above the ground, was a trifle over a yard in length, and weighed 172lb. The normal height and weight of elephants of the same age as "Lili" are—height, between 9ft. and 10ft. at the shoulder, and weight between 7,000lb. and 7,600lb. The nearest approach on record to this diminutive little elephant was a race of dwarf elephants which formerly lived on the Maltese Islands. The teeth and bones of these were discovered some years since, representing every stage of growth from the calf to the aged, and the heights ranged from 4½ft. to 6½ft. at the shoulder. The size of the smallest baby elephant on record was an Asiatic one born in America, which was about the size of a sheep.

765. Has a millionaire ever become a beggar?

A man named Robert Rathgerber, who died in 1894 in Chicago, was once a millionaire, with large business interests in New York. He had a handsome wife and a bright son. An appetite for drink led him to neglect his wife and business, until the former secured a divorce, and the son, following a bad example, went to ruin. His downward career was

persistent and rapid. He became a homeless and penniless outcast, and at last took poison in the streets of Chicago, dying soon afterwards in one of the hospitals, to which he had been taken. Mr. Alexander de Vieune, a well-known millionaire of Napa City, California, on his visit to Europe in 1890 was robbed, whilst staying at Monte Carlo, of his cash, jewels, letter of credit, and papers, and was left insensible by the roadside. He was found by the police and arrested, and, as they did not believe his story, turned out of the place, and compelled, without a penny in his pocket, to beg his way to Marseilles. Reaching Marseilles in a ragged and most deplorable state, the United States Consul shipped him off as a steerage passenger to New York, where he at last found some of his friends, and was able to resume his place as a millionaire. Baron Schultz, who died some time ago in abject poverty on Brother's Island, was once a millionaire. In his day he was a celebrated American dandy, and married Mme. Annie Bishop, the famous soprano.

766. What is the highest price ever paid for a photographic camera?

The most costly camera ever constructed was a huge one made for the Ordnance Survey Department, for the production of the largest maps. If placed on wheels it would do duty for an omnibus, while a further idea of its enormous size may be gathered from the fact that it was far too big to be removed through an ordinary door, and the front of the shop where it was made had to be taken out to enable it to be forwarded to its destination. The camera will take a plate-glass wet plate of 45in. by 30in. in either of the three dark slides. It extends to a total focus of 10ft., and has fronts of different form, to take long or short lenses. The plate weighs from 28lb. to 30lb., and needs two men to manipulate it. The cost of this camera cannot be less than between £200 and £300; while the highest price of a first-class camera for full-sized plates, including Ross and Co.'s (24in. focus) portrait lenses, will not exceed a hundred guineas.

767. In what country is there a newspaper with its sheets or leaves of different colours?

In Japan, the newspaper called the 'Shi Gio Shu Dan Kwai Zasshi' is so printed. The title-leaf is printed on white paper, while the inside leaves are printed on various brightly-coloured papers, as green, orange, and yellow. It is made up of single leaves, that is, the paper is not printed on both sides; the sheet is folded at the fore-edge, not at the back, as in this country, and the printing is done on the first and fourth pages.

The newspaper is about the size of an octavo pamphlet, 9¾in. by 6¼in. In France, M. Pol Martinet, the editor of the daily farthing newspaper, published in Paris, has very ingeniously overcome the difficulty presented by the absence of the farthing from the French purse. The journal is printed on alternate mornings on paper of two different colours. The purchaser, therefore, pays a halfpenny for one day's colour and receives on the next the other colour in exchange. By a decree of the Emperor, a Chinese paper, called 'King Pan,' was ordered a short time ago to be printed in three editions every day. The first, or morning edition, on yellow paper, is devoted to commercial intelligence; the second, or afternoon edition, contains official and general news; and the third, on red paper, is a summary of the two earlier editions, with the addition of political and social articles. In Turin there is a paper printed with an ink that becomes luminous in the dark, so that the matter may be read at night without the assistance of artificial light.

768. Where is the longest macadamized road in the world?

In British India. The Grand Trunk Road, which is 1,800 miles in length, begins at Lahore, the capital of the Punjab. The city is entered by macadamized roads through thirteen gates; while the Lahore District is one of the most important in the Punjab, with an area of 3,648 miles, and a population of over a million inhabitants. After the peace of 1815, the Austrian Government began to make roads, and in sixty years, down to 1875, no less than 60,000 miles of macadamized roads were laid down, besides sixty passes made over the Alps. The longest macadamized road in the United States, the National, is 650 miles.

769. What are the oldest and youngest ages at which a Lord Chancellor has been appointed?

Eighty and twenty-seven respectively. John, Baron Campbell of Stratheden, who was born at Cupar Fife on the 15th of September, 1779, was appointed Lord Chancellor on the 18th of June, 1859, in the eightieth year of his age. He held the appointment (in the Ministry of Lord Palmerston) till his death, in June, 1861. Lord Campbell had been appointed Lord Chancellor of Ireland in 1841, or eighteen years before he became Lord Chancellor of England. Lord St. Leonards (Sir Edward Sugden), at the age of seventy-one, became Lord Chancellor in 1852, in Earl Derby's Administration. Cardinal Beaufort was the youngest Chancellor or keeper; born in 1376, he was appointed in 1403, when he would be twenty-

seven years of age. Geoffery Plantagenet, Archbishop of York, was appointed when he was twenty-eight years of age, as was also Archbishop George Nevil. Sir Thomas Beaufort was appointed at thirty-three; Thomas de Arundel, Archbishop of Canterbury, at thirty-four; and Archbishop Becket at thirty-seven. The youngest lawyer appointed Lord Chancellor was Edward (Lord) Thurlow, who was born in 1732 at Little Ashfield, near Stowmarket, in Suffolk, and appointed Lord Chancellor on the 2nd of June, 1778 (in place of Earl Bathurst, resigned), at the age of forty-six. The next two youngest Lord Chancellors, who were lawyers, were Hugh MacCalmont Cairns, born in the County Down, Ireland, in 1819, and appointed Lord Chancellor in 1868; and the present Lord Chancellor (Lord Herschell), born in 1837, and first appointed Lord Chancellor in 1886.

770. Has any peer in this country ever practised architecture?

Edmund Beckett Denison, afterwards Sir Edmund Beckett, and in 1886 created Lord Grimthorpe, born in 1816, has always interested himself greatly in architecture, and has designed no small number of churches and houses, as well as all the new works at St. Albans Cathedral since 1878, besides alterations at Lincoln's Inn, and the great clock and bells at the Palace of Westminster. Earl de Grey, who held the office of President of the Royal Institute of British Architects from 1835 until 1861, was an architect, and so was Richard Boyle, fourth Earl of Cork and third Earl of Burlington. The Earl of Aberdeen, who in 1814 was created Viscount Gordon, devoted much study to ancient Grecian architecture and antiquities. The Countess of Salisbury can draw out the plan of a house as well as any ordinary architect, and drew out most of the designs for the ex-Premier's new villa in the South of France.

771. Which Colonial Legislature has the largest number of "labour" members?

New South Wales. In its Legislature there are thirty-seven labour members out of a total of 139, or more than one-fourth of the whole body. One other Australian Legislature, that of Queensland, has nearly as great a proportion of labour members—seventeen out of a total of sixty-five; while in Victoria only about one-eighth of the Legislature are labour members. There were in 1893 ninety-four labour members in the Legislatures of the five Australian Colonies, which is an increase of eighty-two over the number of such members in previous Parliaments. Of the total number of these labour members, some twenty are Social Democrats, twenty State

Socialists, and the remainder Trade Unionists of the old school. In many of these places the Parliamentary representatives receive salaries averaging from £100 to £300 per annum.

772. Where was it a custom to break a front tooth as a sign of manhood?

Such a custom exists among the aborigines of Australia. When the young men arrive at the age of manhood, it is the custom in all the tribes to break a front tooth of their upper jaws. Mutilation of the teeth is not, however, limited to the natives of Australia, but is observed by many of the savage or uncivilized races in various parts of the world. Mutilation of teeth, by filing, for instance, is practised in the Malayan Archipelago. It is a religious act, which is celebrated with great festivities. The degree and character of this filing vary with the habits of the family or caste. The operation is performed by an expert, the Tukang pangur (filer), by means of a chisel, three bricks, two files, a small saw, and a pair of cutting nippers, the instruments being rubbed with arsenic and lemon-juice before being used. On the West Coast of Africa it is customary to break several of the teeth on children reaching a certain age.

773. Which locality in the United Kingdom is most frequently visited by shocks of earthquake?

Under a considerable portion of Great Britain is felt the ebb, as it were, of any great European volcanic shock, and slight earthquakes are almost annually felt at Comrie, in Perthshire. As regards the general distribution of earthquakes in England, Milne says that out of 110 shocks recorded, thirty-one originated in Wales, thirty-one along the South Coast of England, fourteen on the borders of Yorkshire and Derbyshire, and five or six in Cumberland. On April 22nd, 1884, an earthquake took place, the most serious that has occurred in this country for four centuries. Originating in the neighbourhood of Colchester, the disturbance made itself felt over an area estimated at about 50,000 square miles. The results were of a very destructive character in Colchester and the immediate neighbourhood. It was felt in various directions in decreasing force.

774. Does sudden fright ever cause deafness?

Sir William Dalby has recorded that it sometimes does, and has given one or two cases that occurred in the course of his own practice. A lady, standing before her toilet-table and looking through a door into the dressing-room, saw in a

mirror the reflection of her husband in the act of cutting his throat. From that moment she was totally deaf. A lady, who just before the Peninsular War had been married, heard suddenly, and quite unexpectedly, that her husband had been ordered out to the seat of war. So great was her horror that she became instantaneously and perfectly deaf, remaining so for many months. A doctor relates that a governess in a family was standing one day in the hall when one of the children of the house, who was sliding on the banisters, fell over them and was killed at her feet. The shock so affected her that she immediately became absolutely deaf.

775. Which nation is entirely free from colour-blindness?

According to Dr. Macgowan, there is a complete absence of colour-blindness among the Chinese. He spent many years in various parts of the Empire, interrogating painters, dyers, and others likely to become acquainted with that visual defect, but could not find any evidence of its existence. At a Chinese hospital he subjected over a thousand patients to examination, but could find no trace of colour-blindness. A careful inquiry made by Messrs. Blake and Franklin (of the Kansas University), amongst the full-blooded American Indians, showed that only seven-tenths of 1 per cent. were colour-blind, the tribes examined being chiefly Pawnee, Cheyenne, and Pottawattamie. It is estimated that in civilized nations between 3 and 4 per cent. amongst males and two-tenths of 1 per cent. amongst females suffer from colour-blindness. In Finland and Norway the rate is as high as 5 per cent., while in Holland it is only 1·43 per cent. Blindness to red is the most common condition; blindness to green comes next in frequency; but blindness to blue is rare. Dr. George Wilson, of Edinburgh, found that out of 1,154 persons, of various occupations, whom he examined, there were sixty-five colour-blind, of whom twenty-one confused red with green, nineteen could not distinguish brown from green, and twenty-five mistook blue and green, or *vice-versâ*.

776. In what country do railway companies provide special vans for cycles?

Specially constructed vans are in use both in France and Germany for the conveyance of cycles. In both of these countries all cycles are taxed, and special badges are affixed to them to show they have been duly registered and the tax paid, and it is more as a check to prevent the Revenue being defrauded than for the safety of the machines or convenience of the owners that such an arrangement has been made. Being all located in one part of the train, the officials can

more readily examine them and detect infringement of the law. In France 8s. is charged for a license, Germany 2s. 6d., and Belgium 5s. In this country the London and North-Western Railway provide specially fitted vans for the conveyance of cycles on their lines, and also collecting vans to convey the cycles from the cycle manufactories in Coventry to the railway station.

777. What is the largest reward ever offered for a lost child?

Five hundred thousand francs (equivalent to £20,000 sterling) was offered, in January, 1894, for the recovery of an American schoolboy, named Webster Conkling, who mysteriously disappeared in Paris at the commencement of the year. His mother, Mrs. Webster Conkling, wishing to have her children —a boy and a girl--educated in France, took up her abode in Paris in the previous September. The boy, about fifteen years old, was sent to the school of the religious order called the Frères Maristes, at Plaisance, and the girl to an establishment directed by the Dames de la Providence, at Colombes. On the 31st of December, young Conkling was to visit his sister at Colombes. One of his schoolmasters set out with him for the Western of France railway station in the Rue St. Lazare. On his way, however, the master lost sight of the boy for a moment, and, on turning round, found he had disappeared, and it was as though the earth had swallowed up the lad. The mother, who is very rich, first offered 25,000 francs reward, and very shortly that sum was increased to 500,000 francs (£20,000). The sum of money was actually deposited at Munroe's Bank in the Rue Scribe.

778. What is the largest amount on record expended in completion of a single volume?

One hundred thousand pounds, that being the cash expended by a New York firm of publishers in the completion of the first volume of their "Standard Dictionary." The work took upwards of four years to complete, and 247 specialists and editors were engaged in its preparation, besides nearly 500 readers for quotations, and several hundreds of other people who have rendered services in various ways. The cost of Dr. Murray's "Oxford English Dictionary" will before it is completed be very considerable. The first volume of 1,240 pages, with 31,254 words in the first two letters of the alphabet—A and B—occupied four years' work. It has been estimated that each volume completed of the huge American "War of the Rebellion" costs £4,000. Ninety-three volumes have been issued of the 120 required to

complete the work. The sums expended on the seventh and eighth editions of the "Encyclopædia Britannica" were as follows: Paid to authors, £40,970; cost of paper, £52,503; printing and stereotyping, £36,708; copper-plate engraving and printing, £18,277; binding, £22,613; advertising, £11,081; sundries, £2,269 The paper duty on the two editions, calculated at 1½d. per lb., was £8,573, or about 17s. 3d. per copy. Altogether a total of £184,425 11s. 4d.

779. What eggs yield oil?

Those of the Algerian locust yield a thick oil, resembling honey in appearance. It burns well, and with alkali makes a good soap. As large quantities of these eggs are collected by the natives in order to destroy them, steps have been taken with a view to extracting the oil for commercial purposes. The female locust lays from 50 to 100 eggs at a time, which are deposited in a hole made in the ground for the purpose, and she usually deposits at least three times each season. The number of eggs laid yearly by the swarms of these insect pests is almost incredible. In the neighbourhood of the Rhone, in one year, 5,250 million eggs were destroyed, and in spite of this work of destruction being carried on in the various countries in which they are found, the locusts still continue to assemble in such myriads that the sky is darkened for hours together as they pass on their destroying march, leaving not a vestige of vegetation behind them.

780. In what European country is no child allowed to enter a workhouse?

This is the case in France and in Austria, where pauper children, instead of being sent to the workhouse, are placed with peasant families, where they are kept until able to earn their own livelihood. In Russia there is a great children's asylum at Moscow, with a branch in St. Petersburg. Homeless infants are received there, and after being four weeks in the institution, are put out to nurse in village homes. There they remain till six years old, when they again enter the institution, and are educated until twelve years old. About 1,300 babies are always in the Moscow Asylum, and some 800 in the St. Petersburg branch. The institutions are kept up mainly by a tax upon playing cards.

781. What is the youngest age at which an English actress has appeared on the stage?

Victoria Vokes began her professional career at the Royal Surrey Theatre, London, when scarcely two years old, in a drama entitled "The Avalanche." Her sister, Jessie Vokes,

also appeared at the Surrey Theatre at the age of four, and subsequently played there a round of juvenile characters. At the age of three, Miss Kate Terry (Mrs. Lewis) made her first appearance on the stage to sing a character song as an old lady of ninety-five. Miss Minnie Terry made her first appearance at the age of four at the Haymarket, in "Partners," and at the age of six was able to earn £10 a week. At that age she acted as "Mignon" in the dramatized version of "Bootle's Baby." The clever little actress, Miss Empsie Bowman, made her first appearance on the stage at the age of four at the Stratford Theatre, where she danced a hornpipe. Mme. Jane Hading, the French actress, at the age of three appeared at the Marseilles theatre as little Blanche de Caylus in "Le Bossu." Miss Patti Rosa, the wealthy American actress, appeared on the stage at the age of four, and continued to play children's parts for over twenty years. Mrs. Kendal began to perform nearly as soon as she could walk and talk. Her first appearance at the age of four was at Chute's Theatre at Bristol (where her mother was acting), as an angel in "Uncle Tom's Cabin." In the last census report there were included 409 males and 203 females of less than fifteen years of age who were classed as actors.

782. Who is the owner of the first photographic camera ever seen in this country?

Lord Swansea has a good many curiosities at his charming residence in Glamorganshire, but amongst all his possessions there is probably nothing that he cherishes more than an old photographic camera which he purchased when quite a youth. This camera is reputed to be the first ever seen in England. When, as plain Mr. Vivian, his lordship was completing his education at Cambridge, photography was just beginning to be appreciated; and the young student devoted a good deal of his leisure to mastering the rudiments of the new art. There still hangs at Singleton Abbey one of the portraits of his fellow-collegians which Mr. Vivian took at that time. Mr. F. H. Talbot, son of Mr. William Henry Fox Talbot, was one of the first successful users in this country of the camera for photographic purposes. Some of the work of Mr. Talbot was done as far back as 1835, and thirty-two of the photographs taken by this pioneer of photography in the years 1839 and 1840 were exhibited by his son before the Bath Photographic Society in 1889. Mr. Talbot's services to photographic art secured him the medal of the Royal Society. The honour of being the first photographer in this country is claimed for Mr. Thomas Wedgwood, a son of the celebrated potter, who, in 1793, succeeded in taking a

photograph of a Savoyard piper, in the costume of his country. Carte-de-visite portraits were first taken at Nice, by M. Ferrier, in 1857, when the Duke of Parma had his portrait placed on his visiting-cards.

783. Who were the most distinguished twins ever born?

The distinguished twins that gained most notoriety were Eng and Chang, known as the Siamese Twins, who were born of Chinese parents in Siam in 1811. Their bodies were united by a band of flesh stretching from the end of one breastbone to the same place on the other twin. These twins, purchased from their mother at Me-Kong, were taken to America by Mr. Hunter, in 1829, and subsequently brought to England. After realizing a competence by the exhibition of themselves in the various countries of Europe, the Siamese Twins settled in one of the Southern States of America, where they married two sisters and had families. They died within two and a half hours of each other, on January 16–17, 1874.

784. Which living Englishman has the greatest reputation as an Alpine climber?

This is the Rev. William Augustus Brevoort Coolidge, editor of the 'Alpine Journal,' the official organ of the Alpine Club, and who, with Mr. W. M. Conway, has published a series of "Climbers' Guides." Mr. Coolidge has climbed more mountains than any other Englishman living, and has made more than 700 expeditions amongst the Alpine mountains above a height of 10,000ft. Every summer he takes new ground and goes carefully over that district, ascending the chain of mountains within it peak by peak and pass by pass, in order that other climbers to follow him may have a faithful and full description to guide them on their journey. England furnishes a much larger number of mountain climbers than any other nation; Austria in this respect coming second. Mr. W. M. Conway, the great Asiatic mountain climber, recently reached an altitude of 22,500ft., that is, nearly half as high again as the summit of Mont Blanc. Mr. Edward Whymper, who was born in London, April 27th, 1840, has been called the prince of mountain climbers. He climbed Chimborazo, attaining a height of 20,545ft. above the sea on January 3rd, 1880, and 20,489ft. on July 3rd, 1880; Cotopaxi, a volcanic mountain, on February 18th, to a height of 19,600ft.; Antisana, March 10th, 19,260ft., and Cayambe, on April 4th, reaching a height of 19,200ft. He has, moreover, twice explored Greenland. In recognition of his distinction as an Alpine climber, the King of Italy bestowed upon him the decoration of the Order of St. Maurice and St. Lazarus.

785. Which European country raises the largest sums of money for military and naval purposes?

M. Edmond Thery, a French economist, has published some voluminous statistics to show the enormous increase in all the countries of Europe of the amount raised each year for military and naval purposes. From his numerous calculations the following table is taken, contrasting the amount spent on the army and navy in different countries in 1869–70 with that spent in 1892–93 :—

Countries.	1869-70.	1892-93.
Russia	£24,624,000	£44,284,000
Great Britain	24,220,000	33,296,000
France	21,972,000	35,600,000
Germany	13,833,000	32,908,000
Austria-Hungary	9,111,000	16,856,000
Italy	7,376,000	14,204,000
Spain	5,112,000	6,812,000
Holland	2,020,000	3,012,000
Belgium	1,472,000	1,880,000
Switzerland	192,000	1,468,000
	£109,932,000	£190,320,000

There is thus an increase in twenty-three years of £80,388,000. The increase per cent. has been : In Germany, 137 ; Italy, 92 ; Austria, 85 ; Russia, 79 ; France, 62 ; Great Britain, 37 ; and Belgium, 28.

786. Which English peer can claim the most ancient nobility?

The Duke of Norfolk (Henry Fitzalan-Howard), as Earl of Arundel, now his second title, which was created in 1155, in the reign of Henry II. His full titles are : Duke of Norfolk, Earl of Arundel, Surrey, and Norfolk, Baron Fitzalan, Clun, Oswaldestric and Maltravers ; Earl-Marshal and Hereditary Marshal of England. He ranks as premier duke immediately after the Princes of the Blood Royal, and is also premier earl. The only other peerage in the kingdom dating back to the reign of Henry II. is that of the Irish baron, Lord Kingsale (John Constantine de Courcy), created a baron in 1181. The family of Courcy claims alliance with most of the Royal Houses of Europe, paternally through the Dukes of Lorraine, and maternally through the ducal house of Normandy. The earliest English peerage by writ is Baron de Ros, created 49 Henry III., 24th December, 1264. The Duke of Sutherland, who is Earl of Sutherland in the Scottish peerage, holds the most ancient title in North Britain, the first earl having been created about 1228, or, according to some Scottish writers, as far back as 1057.

787. What individual in this country has carried on business under the largest number of different names?

A stationer and account-book manufacturer named Walter Henry Scott, otherwise Dawson, has used at least sixteen different names in the course of his business. He traded as "Barnes and Scott" in the stationery business, but in 1891 discontinued this owing to the seizure of the stock by the landlord for arrears of rent. In 1888 he started as a share dealer under the style of "E. Mills and Co.," at 39, Moorgate Street. Since then he has carried on stock and share dealing business as "Montague Vaughan," "Henry Scott," "S. Morley," "Charles Hamilton," "Dawson and Son," "Charles Maple and Co.," "George Gurney and Co.," "W. H. Southwell," "George Moore and Co.," and "Walter Scott and Co." At times he has also used the names of "Charles Morris," "Wilkinson and Co.," etc.; and has done business as a bookmaker in the name of "Frederick Nunn."

788. Are any British plants luminous?

Luminous appearances have been observed in several of the lower classes of plants, such as fungi and the decaying wood in which fungi are developed. The potato in a state of decomposition will give out a powerful light, and different species of agaricus emit flashes of a phosphoric nature. The flowers of the nasturtium, at the end of a hot summer day, give out intermittent light. The same phenomenon has been witnessed in other flowers, but almost exclusively in those that are yellow or orange-coloured. Thus it has been seen in the corolla of the sunflower, in the garden marigold, monk's hood, the orange lily, the poppy, and the arum. Some of the plants which grow in mines and other subterranean places in Britain give off a considerable amount of light.

789. Where was the first woollen manufactory in the United Kingdom established?

At Winchester, an ancient city in Hampshire, said to have been founded B.C. 892, and which during the Saxon period was made the capital of England. The woollen trade of Winchester dates from the earliest periods, and there was a flourishing woollen manufactory there during the period Britain was occupied by the Romans. The Ancient Britons before the Roman invasion were familiar in a rude fashion with the handicrafts of spinning and weaving, and it is on record that Boadicea wore a tunic, checked with a variety of colours, of British manufacture. The Roman factory was doubtless

the means of improving the weaver's art in this country, and establishing the trade at Winchester on a more efficient basis. It was not long before some of the finest and most costly robes worn in Rome itself, during the most luxurious period of the Empire, were supplied from British factories. The woollen industry of the United Kingdom dates its importance from the reign of Edward III., who introduced a colony of workmen from Flanders. In 1780, the total wool used in this country was 83,000,000lb., of which 3,000,000lb. was imported. In 1892 the figures were: Home clip, 153,380,321lb.; imported, 737,594,063lb., or a total of 890,974,384lb. as against the 83,000,000lb. in 1780.

790. How many Jewish synagogues are there in this country?

There are eighty-four synagogues (with over a hundred ministers and readers) to meet the requirements of the Jews of the United Kingdom, who number over 94,000; those in London number about 68,000, and the remainder are located in various towns throughout the kingdom. In addition to the above there are about 150 minor synagogues, called Bethels or Chevra synagogues. The Jews support their own poor, and raise in this country nearly £150,000 annually for religious and benevolent purposes. The most magnificent synagogue in this country is that in Great Portland Street, London, W. One of the most beautiful in Europe is the chief one of Amsterdam; and the finest in the world is in Berlin. The city having the largest number is New York, forty-nine, to accommodate 90,000 Jews.

791. Has an animal ever ascended in a balloon?

Horses and ponies have frequently been pressed into service as balloon passengers. Mr. Green is said to have taken up a horse with him in May, 1828, and a pony in July, 1850. Lieutenant Gale made an ascent with a horse from Bordeaux in September, 1850. M. Portevin ascended on a horse in the vicinity of Paris, and his wife frequently did so, in addition to ascending in the character of "Europa," on the back of a bull. The largest balloon yet made is that of Herr Gauswin, of Berlin. It is cigar-shaped, 480ft. long, 48ft. in diameter, gas capacity 20,000 cubic yards, car and engine weighs 21½ tons, lifts 3½ tons, and is propelled by screws at a speed of ten miles an hour. At the Paris Exhibition of 1878 there was a large captive balloon, which took up fifty persons at one time, while a larger one, to carry one hundred passengers, was projected for the 1889 Exhibition.

792. Who was the youngest defendant that ever appeared in a court of justice?

The two youngest defendants ever summoned in a court of justice came before the Southampton County Bench in August, 1891. The youngest was a baby two and a half years old, who could not toddle into the dock. The co-defendant was a brother aged five years, and he was so small that he had to stand on the dock seat to be seen. The charge against them was one of damaging peas, but the magistrates refused to hear the case. In December, 1893, John Barton, aged fourteen, was at Croydon charged, in conjunction with four other boys, with stealing half a bushel of maize. The police stated that Barton had been six times convicted, twice for larceny, and that he had been birched. He was convicted for the seventh time, and sent to the Redhill Reformatory for four years. No fewer than 500 children under ten years of age have in twelve months been taken into custody in London, charged with being drunk and incapable.

793. What is the shortest sentence ever passed on a convicted housebreaker?

One day's imprisonment, which practically meant nothing more than detention till the rising of the Court. This sentence was passed by Mr. Recorder Hopwood at the Liverpool City Sessions in July, 1893, on Thomas McGee, aged forty-three, vocalist, who had been convicted of breaking into the Empire club-house and stealing billiard-balls. At the same sessions, Robert Ward, aged seventeen, shoeblack, was convicted of breaking into a counting-house and stealing money, and sentenced to one day's imprisonment. Mr. Hopwood has a strong belief in the efficacy of short sentences. Speaking recently on this subject, he said that in his experience of eight years as Recorder of Liverpool, he had never met a case which he thought deserving of penal servitude. From February, 1886, to December, 1893, 3,747 prisoners had been brought before him. If the sentences inflicted had been on the same scale as those imposed by his predecessor, the terms of imprisonment which he inflicted would have been increased by 2,926 years. He thought that one-third of those now in gaol ought not to be there at all, and that another third might be set at liberty without any danger to the State.

794. Was any daily newspaper established in this country with a view to assisting charity?

The 'Morning Advertiser,' which issued its first number on the 8th of February, 1794 (price 3½d.), was so. The first

number contained an address from the directors of the Friendly Association (subsequently incorporated by charter) for the benefit of publicans and for the assistance and relief of their decayed brethren and families, stating that they had resolved to start a newspaper as the most likely means of attaining the laudable and charitable end for which they were associated. They further resolved that two-thirds of the profits arising from the paper should be equally divided annually among the subscribers, or their assigns, and the remaining third applied to a fund of charity for the support and assistance of such publicans and their families as might fall into decay and be worthy of relief, such charity fund to be entirely under the direction of the committee. The newspaper, which was non-political, proved successful from the first, and on reaching its centenary number in 1894, it stated that, from the receipts of the paper alone, a sum of over £400,000 had been expended in weekly allowances and temporary assistance. The Licensed Victuallers' School, the child of the incorporated society, has educated, clothed, and maintained 2,620 children at an outlay of something like £260,000, so that the benevolent expenditure may be taken as close on £700,000, or very nearly three-quarters of a million sterling. The price of the paper rose to 6½d. a copy during the time of the heavy war taxes, and with their removal the price was gradually lowered to 5d. in September, 1836, to 4d. in July, 1855, to 3d. in October, 1861, and to 1d. in January, 1891. The first issue appeared as the 'Morning Advertiser,' but this title was altered in No. 3 to the 'Publicans' Morning Advertiser,' the added word being printed across the top of the page till April 23, when it was engrafted in the central ornamental star in letters which grew smaller and less apparent with each successive alteration of type, until finally they disappeared.

795. Which is the largest public park in the United Kingdom?

The largest public park in the United Kingdom is Phœnix Park, Dublin; its length being three miles, and its breadth two miles. The largest public park in Europe is the Prater Park, in Vienna, which has an area of nearly eighty square miles. This park is so beautifully planted, decorated, and otherwise laid out, that it is considered the finest public park in Europe. In proportion to population, Dublin is best provided with public parks, 1,753 acres, which gives each 175 persons an acre of park for amusement; Edinburgh comes next, 407 acres, or 410 persons per acre. Norwich has the least, only seven acres, or 12,175 persons per acre.

796. Are cabbage-stalks used for fence-rails in any part of the British Isles?

This is the case in Jersey, where a prolific kind called the Cesarean or cow-cabbage is grown for cattle-feeding. This cabbage attains gigantic proportions for a vegetable, and the stalks, which frequently grow to heights of 12ft. and 16ft., are used as rails for fences, and as rafters for the thatched roofs of farm buildings; while shorter ones are made into umbrella handles and walking-sticks, which are much in request as curiosities amongst tourists. This sort of cabbage was introduced by Mr. Fullard, and was asserted by that gentleman's cow-herd to be so prolific that five plants of it per day are, with proper management, sufficient for ten oxen or 100 sheep. The largest cabbage farm in the world is to be found at Chicago, United States, in a district known as the cabbage prairie; its area is 190 acres, upon which are raised 1,114,000 cabbages annually.

797. Who is the greatest photograph collector in this country?

Princess Beatrice Mary Victoria Feodore, who married Prince Henry of Battenberg. Over 800 photographs are placed about her various rooms, whilst she has thousands safely stored away, for she has been an assiduous collector of photographs ever since she was a tiny child. The Princess of Wales has a very large number of photographs, as she uses her camera more than any other member of the Royal Family, and frequently sends a hundred negatives at one time to be developed. The Duke and Duchess of Fife, as also the Duke and Duchess of Connaught, are enthusiastic amateur photographers, and possess several hundred photographs taken with their own cameras.

798. Who owns the most expensive violin?

The highest price ever paid for a violin is £2,000, by Mr. R. Crawford, of New Park, Trinity, near Edinburgh. It is known as the "Salubue Stradivari," and dates 1716. The cost of the raw materials of a violin, comprising seventy different parts, has been estimated at about 4s. 6d. It is said that the City of Pittsburg, in Pennsylvania, which had a population in 1890 of 238,617, stands on ground once given in exchange for a violin.

799. What is the largest number of players any cricket eleven has played a match against?

Fifty-five. This match was played in 1846 at Shillinglee Park, the seat of the Earl of Winterton, in Sussex, a few miles

from Haslemere, and was between the Earl of Winterton's eleven and fifty-five labourers on the estate, resulting in a draw, the match not being played to a finish. Three years earlier, Lord Winterton's eleven played a match on the same ground against thirty-seven labourers, and won by five wickets. In matches between sides of unequal merit, the stronger players generally number eleven pitted against increasing numbers ranging from fifteen to twenty-two. When Lord Sheffield's team visited Australia in 1892, one of their matches was played against twenty-three of Nepean and district at Penrith, on the 16th and 17th of February. In Samoa, when cricket was introduced some eleven years ago, the game was taken up with such enthusiasm that sometimes matches took place with 100 players a-side, and a match often lasted for weeks.

800. Which is the largest University in the world?

The University of Paris is the largest in the world, and has an attendance of 9,215 students, Vienna coming next with 6,220 students. The University of Berlin is attended by 5,527 students, and has 335 instructors. France has 1 University student in every 865 of its population, Spain 1 in every 1,065, Belgium 1 in 1,406, Denmark 1 in 1,600, Switzerland 1 in 1,700, Germany 1 in 1,802, Sweden 1 in 1,860, Norway 1 in 1,950, Great Britain 1 in 2,150.

801. Where is the largest day-nursery in the United Kingdom?

In London Road, Plaistow, in the parish of West Ham, in Essex. St. Mary's Day-Nursery, which was opened by the Duchess of Westminster, on the 29th of April, 1893, built to accommodate 150 children and fifteen nurses, is the largest and one of the most complete buildings of its kind in the kingdom. Another large crêche is that founded by Mrs. Hilton, in Stepney Causeway. It occupies three ten-roomed houses. The crêche system is of French origin, the first crêche being opened by a Mme. Marbeau, in Paris, more than a century ago. Her idea was subsequently adopted in Belgium, where in Brussels the crêches are admirable institutions. It was after visiting these that Mrs. Hilton, of London, a member of the Society of Friends, introduced the system into England. Mrs. Hilton has been the indirect means of establishing similar institutions throughout this country and in some parts of the United States. There are now seventeen day-nurseries in London, mentioned in the London Directory. Glasgow has a day-nursery association, which during the last ten years has provided that city with a number of these institutions, proving of immense benefit to the poor mothers of that district and their children.

802. What quantity of mahogany is imported into this country every year?

The quantity of mahogany annually imported into Great Britain amounts to 50,000 tons, and is worth half a million sterling. It grows chiefly in Honduras, which is part of Central America, and in Cuba and other West Indian Islands. The quantity of mahogany exported from British Honduras averages 3,000,000 cubic feet a year, and in 1892 amounted to 5,294,133 cubic feet. It costs, when ready for shipment, from 40dols. to 50dols., which equals from £8 to £10, for every 1,000 cubic feet. A single mahogany tree in Honduras was recently cut into boards, which, when sold in the European market, realized over £2,000.

803. What is the longest residence of any pauper inmate of a workhouse?

Ninety-two years, the period during which Eliza Humphries, who died in 1893 in the Sheppey Union Workhouse, Sheerness, had been an inmate of this establishment. The deceased was born in this workhouse, and remained chargeable until her death, a somewhat weak intellect preventing her from earning her own livelihood. She was affectionately known as the "mother" of the house. Frequently she would ask the visiting guardians whether her long residence had not entitled her to a pension. About 1885 an old woman of the name of Henley was buried at Gosport, in Hampshire, after living more than ninety years in the workhouse. Her early history is unknown, but the parochial records show that in 1801, when the new workhouse was built, Henley, who was then six years of age, was transferred from the old building to the present one. The last forty years of her life were spent in the workhouse infirmary. Some six years or so previous to her death she fell into a trance, in which she remained so long that she was regarded as dead, and was actually placed in her coffin before the mistake was discovered. There are 749 workhouses in England and Wales, and 480 in Scotland. Liverpool has the largest workhouse in the world; it accommodates over 5,000 inmates.

804. Which club in the world has the finest library?

The Athenæum Club, 107, Pall Mall, London, established in February, 1824, has the finest and most important club library in the world, which includes one of the choicest collections of books of reference. All departments of literature are well represented by rare and valuable works, more particularly on history, topography, and archæology. This club was originally called the "Society," and first met in the Clarence Club House,

its present domicile being opened in 1830. The club's collection of English pamphlets, including those brought together by Gibbon and Sir James Mackintosh, is one of the most complete ever made. The club having the most valuable library in the world is the Carlton. On its shelves are to be found copies of some of the rarest books known, duplicates not being found even in the British Museum Library. The club having the greatest number of volumes in its library is the Union, of New York. It has already over 170,000 volumes, and the yearly additions are said to exceed 5,000.

805. Which establishment in this country is the largest employer of women?

The Post Office, which employs upwards of 27,000 women, the exact number in the published report for the year ending March 31st, 1893, being 27,097. Of these 21,088 are serving the Postmaster-General in England and Wales; 2,676 in Scotland, and 3,333 in Ireland. The United Kingdom has more women workers than any other State in the world in proportion to the population. Twelve per cent. of our working classes are women; 70,000 women are employed in public-houses; 616,000 as dressmakers; 1,258,285 as domestic servants; 4,500 in printing establishments; and nearly 25,000 are employed at glove-making, in Worcester. In London alone there are 200,000 factory girls.

806. Where is the largest orchard in the world?

The largest orchard in the world is in Barbara, California, U.S.A., and belongs to Elwood Cooper. It extends to 1,700 acres, and contains 10,000 olive trees, 3,000 English walnut trees, 4,500 Japanese persimmon trees, 10,000 almond trees, and about 4,000 other fruit and nut trees. This orchard is said to bring the owner an income of not less than £150 per acre. There are many fine orchards in Jersey and Guernsey; in the former island is an orchard said to contain 60,000 pear trees.

807. Which plant in this country grows most rapidly from seed to flower?

No plants in this country grow so rapidly as those annuals of the cruciferous order, two of which may be specially singled out for the almost marvellous rapidity of their growth from seed to flower, namely, the common cress, *Lepidium sativum*; the English name of which is derived by some botanists from the Latin verb crescere, to increase or grow fast: and the white mustard, *Sinapis alba*. These grow very quickly and, without forcing, will flower and seed within

a week after being planted under favourable conditions; while grown under moderate heat, the cress has been known to yield a crop for salad purposes in less than forty-eight hours. The seeds of this plant will even grow without soil if placed on flannel saturated with warm water and its temperature maintained. The most rapidly growing plant in the world is the bamboo. It has been known to increase in growth at the rate of 5½in. per diem. The seed of a turnip is exceedingly small, not larger perhaps than the twentieth part of an inch in diameter, and yet in the course of a few months this seed will grow into 27 millions of times its original bulk, and this in addition to a considerable bunch of leaves. Dr. Desaguliers has made some experiments proving that in an average condition a turnip seed may increase its own weight fifteen times in a minute. By an actual experiment, made on peat ground, turnips have been found to increase by growth 15,990 times the weight of their seeds each day they stood upon it. The plants which increase in growth at the slowest rate are the thin yellow lichens, which grow on the bare surfaces of stones. One of these was carefully watched for forty years by the botanist, Vaucher, without his observing that it increased to any perceptible extent.

808. Has a jury ever returned a verdict in rhyme?

The jurors in a recent New York case retired to consider their verdict at five o'clock on a Wednesday evening, and were locked up all night. At ten o'clock on Thursday morning they filed into court, and the foreman handed an envelope to the judge. The contents were then given to the clerk of the court, who, with as much solemnity as the occasion would allow, read out a set of verses, two of which may be quoted :—

> A cruel man invoked the law
> To punish him for what he saw:
> To court was haled the two-named man,
> And went to prison in a van.
>
> He sues these men for damage great,
> And for the ills they did create.
> Within our hands his case is placed,
> And we, locked up, now feel disgraced.
> The tables turned, he treats us ill,
> And we are glad that he gets nil.

809. Who owns the most valuable precious stone?

The highest price ever given for a pearl is £115,000, paid to Tavernier by the Shah of Persia three centuries ago. This valuable pearl is still in the possession of the Sovereigns of Persia. The largest opal known weighs 700 carats, and realized £2,000. The largest emerald is owned

by the King of Italy, 6in. long and 3in. thick, and upon it has been engraved a copy of "The Last Supper," after Domenichino. The largest ruby is to be found among the Crown jewels of Russia; and as these gems when of large size are ten times more valuable than diamonds, it may probably be the most valuable precious stone in the world.

810. In which part of the world are all the inhabitants tattooed?

In most parts of the world where tattooing is the custom, it is confined to either one sex or the other; but in the Marquesas and Society Islands, of the South Pacific Ocean, it is practised by both sexes. In the case of males in the Marquesas Islands, the skin, which is naturally of tawny complexion, is rendered almost black by punctures over the whole body, while the women are punctured only a little. In the Society Islands the operation is performed upon all the inhabitants at about twelve years of age. On the other hand, at Samoa, or Navigator's Islands, and at Tonga, or the Friendly Islands, this practice, for adornment purposes, is restricted to the men, and in Fiji it is confined to women, though these are islands of the same ocean. In Fiji and Samoa the custom is very prevalent, and the birth of each child is registered by a tattoo mark on the mother's hand. In the Sandwich Islands widows have the names of their departed husbands tattooed on their tongues. In Burmah every man is tattooed, and unless his skin be unusually dark, he looks at a little distance as if he were clothed in a tight-fitting pair of knee-breeches. In Japan, tattooing was practised to such an extent that a law prohibiting the practice had to be passed.

811. Is the right or left arm the longest?

Some interesting facts are available regarding the comparative length of limbs. In a majority of cases it has been found that the right arm and the left leg are the longer. By actual measurement of fifty skeletons, the right arm and left leg were longer in twenty-three cases, the left arm and right leg in six, the limbs on the right side longer than those on the left in four, and in the remainder the inequality of the limbs was varied.

812. Where are lawyers imprisoned if they lose a case?

In China, the headmen, in all ranks, civil and military, whose duty it is to secure the punishment of criminals in their respective jurisdictions, are themselves punished if they fail to do so. Mr. J. Thompson, Fellow of the Royal Geographical Society, in a work on China, mentions two, by name On and

Yen, who, failing to find certain robbers, were themselves sentenced to forty blows with the bamboo each, and threatened with dismissal if they did not arrest the robbers in a month's time. "This system," he says, "leads to endless abuses, torturing supposed criminals to obtain convictions against them, to bribery and rascality. To such a degree is this carried on that the mandarins, many of them, leave their entire salaries in the hands of the treasurers to meet fines for the malpractices of themselves and their subordinates. A man cannot be convicted according to Chinese native law unless he confesses himself guilty, and magistrates therefore are tempted to extort confessions by the rack or bamboo in order to save their own positions."

813. How much is spent annually in the United Kingdom in charity?

An average of ten millions per year is spent in charity throughout the United Kingdom. In London 150,000, or about 1 in 18 persons, live upon charity, at a cost of about 11s. 6d. per head of its population. France expends on charities every year £5,554,000; Italy, £2,280,000; and the United States, £10,800,000.

814. What was the biggest bag of game ever secured by a shooting party in one day?

No bigger record has been made than the 2,626 head bagged in one day by a shooting party at Bromhead. It was perhaps a more wonderful feat in 1753, when a shooting party in Bohemia, continuing their shooting for twenty consecutive days, secured 47,950 head of game, or an average of 2,397 per day. Of this grand total, 19,545 head were partridges, 9,499 pheasants, and 18,273 hares. The rest of the bag was made up of stags, wild boars, roedeer, foxes, etc. At another shooting party in Hungary, in which the Prince of Wales took part, with Baron Hirsch, after twenty-one successive days of shooting, 30,451 head were secured, or an average of 1,450 per day; the highest number on any single day being 2,540. In the matter of rabbit shooting, the largest number bagged in one day was 5,011, secured by a party of ten guns in September, 1891, or an average of 500 rabbits to each member of the party. On August 30th, 1884, Lord Walsingham made the "record" bag. He was shooting over his Blubberhouse Moors, in Yorkshire, starting at 5.15 a.m., and finishing at 7.30 p.m. In the last half-hour, walking home, fourteen birds were brought down, and 1,058 grouse were killed in all. That is the biggest bag made by any one gun.

815. What becomes of the log-books of the vessels in the British Navy?

According to the "Queen's Regulations and Admiralty Instructions," in the Royal Navy, at the end of each calendar month the navigating officer transmits, through the captain, to the commander-in-chief, a complete copy of the log-book, and at the end of each year he (the navigating officer) delivers the original log-book to the captain, to be kept by him until the ship is paid off and then to be sent to the Admiralty and retained there for many years, eventually finding a last resting-place at the Record Office. In the mercantile navy the official log-book is issued by the Board of Trade at the beginning and returned to that department at the end of each voyage. It contains a record of the crew and their characters, ship's draught of water, offences committed, desertions, sickness, deaths, medical treatment, collisions, etc., and is thus a sort of civil or police record of the voyage. During 1893 the Navy Records Society was founded to open up the sources for our naval history and for the elucidation of questions of naval archæology, etc. It has over 200 members.

816. What is the greatest length of any programme for any entertainment in this country?

Travelling menageries, as a rule, furnish the longest programmes. In 1881, Lord John Sanger visited Ayr, and had so many novelties to display that a list of the various sights and entertainments filled a detailed programme which measured 6ft. 4in. At the Royal Aquarium, Westminster, during the Easter Holidays of last year, there was provided such an extensive entertainment that the programme closely printed measured 1¼yds. in length. Some of the London theatres derive a large revenue from the advertisements on their programmes. One of our great advertising contractors estimates that in London alone quite £30,000 a year is cleared out of programmes of various kinds by managers and those who farm the advertisements out.

817. Which European country has the largest number of nobles?

There are over 500,000 nobles in Russia; 470,000 in Spain; 239,000 in Austria; in France, 360,000 before A.D. 1790 and the Reign of Terror and the Revolution, of whom 4,120 belonged to the *ancienne noblesse*, or old noble families. In the beginning of 1894 there were only 1,554 persons with hereditary titles in the United Kingdom. In Russia the nobility enjoy freedom from the poll-tax, and till 1871 were

free from the conscription also; and the nobles form in every province a separate body, headed by a marshal, chosen by and from themselves. But a noble in that country must enter the army or civil service if he would attain precedence in society. There are ten grades in the civil service, and ten grades of commissioned officers in the army, and these alone confer social standing in the land of the Czar. It is stated that there are whole villages in Hungary in which every Christian inhabitant is a nobleman. Wholesale patents of nobility used to be conferred on villages and small townships in the days when the Kings of Hungary wanted to stir up their subjects to fight against the Turks. Dom Pedro, the late Emperor of Brazil, built and maintained a lunatic asylum out of the money with which his subjects purchased from him titles to life peerages. Nobles are very plentiful in Italy. A year or two ago there were in the peninsula 400 princes, 458 dukes, 958 marquises, 1,679 counts, 353 barons, and five viscounts, as well as 1,234 persons of patrician rank, 2,273 with a right to the designation "noble," 318 distinctively signori, and 46 hereditary knights.

818. Where are the law courts in which judges and jurymen smoke cigarettes while a trial is being heard?

In Siam. There the judges, counsel, prisoner, witnesses, policemen, and spectators all sit smoking cigarettes and cigars. Tea, too, is handed round occasionally in court. This practice also prevails in the law courts of Mexico. In that country the judges and jurymen enjoy their cigarettes while the proceedings are going on, and scarcely anyone in the court is seen without a cigarette. Even the prisoners are allowed the solace of a smoke.

819. Has a real wedding ever been celebrated on the stage?

A real wedding was some time ago celebrated on the stage of the Grand Opera House, Newark, New Jersey, U.S.A. The bride was Miss Violet Mascotte, the leading member of the Violet Mascotte British Burlesque Company. The bridegroom was Mr. Wilfred Chasemore, the manager. The ceremony took place during the last act of the performance of "Sindbad; or, the Lass that Loved a Sailor." The entertainment was temporarily discontinued, and Mr. Chas. A. Pussey, the comedian of the company, came forward and announced that the ceremony was about to take place. The bride, in her costume of Sindbad, stepped from the wings, draped in a cloak. She was followed and surrounded by the chorus. Then the bridegroom

appeared in a dress suit, with a justice of the peace. The chorus served as bridesmaids, and the male members of the company acted as "best men." Another stage wedding took place a few years ago at Atlanta, Georgia. The bridegroom, Hiram Lester, was said to be a centenarian, whilst the bride, Mary Moseley, was eighty-one. No smaller building than the Opera House was large enough to contain the crowds that flocked to see the ceremony, for which a charge of 25 cents was made to see the marriage performed on the Opera House stage.

820. What is the age of the youngest policeman in the world?

Five, that being the age of the youngest person in the world who wears the police uniform. Louis Claurig is in the New York City Police, Charles Street Station, and wears a complete uniform, answers the roll-call, and turns out regularly for night duty. In Paris there is a corps of police drummers composed of young lads. Its functions are, when riots are apprehended, to supply to each police commissioner and inspector a drummer or drummers. The beating by any of these young men of the drum is equivalent to the reading of the Riot Act. In 1893 it was recorded that at King's Lynn, the son of the chief constable had been made a sergeant of police when barely eighteen years of age. In England there are thirteen police for every 10,000 of the population; in Scotland ten, and in Ireland twenty-nine. In England the police cost £98 per man, equivalent to 2s. 7d. per inhabitant; in Scotland £92 per man, equal to 1s. 11d. per inhabitant; while in Ireland the rate is £115 per man, equivalent to 6s. 8d. per inhabitant. The London policeman on an average arrests seven persons every year, while the Paris official arrests twenty-nine. For each offender the police expenditure is £13 in London and £5 in Paris.

821. Has a field ever been ploughed by electricity?

This has been done many times; the first occasion on record being in 1879, when a field of six acres at Sermaize, La Marne, in France, was ploughed by electricity in six hours with a wire attached to a 12-horse engine, a mile distant. A farmer named Meiner, at Oissel, in 1881, ploughed one of his large fields by electricity, the motive-power being obtained from a waterfall. The firm of Siemens and Halske, with one of their electric ploughs, have been experimenting on the estate of Biesdorf, the property of Arnold Von Siemens. Having proved the practicability of successfully ploughing the land by electricity, they have introduced their electric ploughs into Java, where large tracts of land lie fallow owing

to the destruction of draught animals by the cattle plague. Ploughing by electricity has also been introduced in connection with a large estate in Central Spain. An Australian inventor has perfected a method of ploughing with dynamite. The explosive is used in very small quantities, and there is an apparatus for touching it off. The result is to thoroughly disintegrate the soil.

822. Which railway company in this country owns only one engine?

The Parliamentary returns relating to railways and their rolling stock show that six railway companies in England and Wales own only one (locomotive) engine each. These are the Easingwold Railway Company; Gorsedd Junction and Portmadoc Railway Company; Milford Haven Dock and Railway Company; St. Austell and Pontewan Railway, Harbour, and Dock Company; Saundersfoot Railway and Harbour Company; and the Stocksbridge Railway Company. Fourteen railway companies own only two locomotives each, namely, twelve in England and Wales and two in Ireland. Eight railway companies own only three locomotives each, namely, four in England and Wales and four in Ireland. Europe can turn out yearly 6,400 locomotives, distributed as follows: Great Britain, 2,200; Germany, 2,000; France, 1,000; Belgium, 500; Austria, 400; and other countries, 300.

823. Has a British earl ever earned his living as a jockey?

David Stuart Erskine, the present Earl of Buchan, who was recently examined before the Newbury Bankruptcy Court, earned his living as a jockey previous to his succeeding to the earldom. Earl Buchan attributed his position as bankrupt to the fact of his having indorsed a bill, for which he received no consideration, in favour of the petitioning creditor, a money-lender, and his being unable to pay the same. The Earl explained, in the course of his examination, that his second son, the Hon. Albany Erskine, who was engaged in business, was in want of money, and he indorsed a bill for him, believing his son would have been able to meet it. The Earl also admitted that he was receiving an allowance from his eldest son, Lord Cardross, to whom, in 1872, he transferred his Linlithgowshire estates, Lord Cardross undertaking to pay his debts, which had reached £35,000. As the Earl had no allowance from his father before coming into the title and estates, he got his living as a jockey, and had incurred the liabilities mentioned.

824. Which public singer has sung the same song the greatest number of times?

Three public singers run each other pretty closely in this respect, namely, Adelina Patti, with "Home, Sweet Home"; Henry Russell, with "Cheer, Boys, Cheer," and "There's a Good Time Coming"; and Sims Reeves, with "The Bay of Biscay" and "My Pretty Jane." Patti has had one long continuous run of popularity and success in every part of the world since November, 1856, a period of nearly thirty-nine years, and no song of hers has been a greater favourite than "Home, Sweet Home." Henry Russell commenced his public career as a singer as long ago as 1833, and had a successful run for between thirty and forty years. "Cheer, Boys, Cheer," was sung by the Guards as they started for the Crimea, and is the only air played by the regimental band when a regiment goes abroad. Another popular song of Mr. Russell's was in 1889, by order of the Admiralty, adopted by the Marines as their own special march, the song, "A Life on the Ocean Wave." Sims Reeves commenced as a public singer in 1839, and earned for himself the position of England's leading tenor, invariably charming lovers of music with his rendering of the two songs named above. Mr. Moore, of Moore and Burgess, in addition to writing upwards of 100 songs, has given one special song every night for over eleven years.

825. What was the shortest will ever drawn up?

The shortest will on record is said to be one made by a man who considered that he only needed three words to dispose of all his worldly possessions. These words were, "All to wife," and such will, properly executed and witnessed, gave no opening to upset it. The will of Sir James Fitz-James Stephen, who died in 1894, consisted of these words: "I leave all my property to my dear wife." The late Matthew Arnold's will runs: "This is my last will. I give all my property to my wife." The poet should have appended the five words, "whom I appoint sole executrix," and the omission involved some little extra cost to his estate in taking out letters of administration. The will of Rabelais, the French humorist, was also a very short one, and was as follows: "I have no available property; I owe a great deal; the rest I give to the poor." The will of William Murray, Earl of Mansfield, Lord Chief Justice of the King's Bench from 1756 till 1788, and who died in 1793, in the eighty-ninth year of his age, was written by his own hand on half a sheet of note-paper, though it disposed of half a million sterling of property. F. B. White, a well-known newspaper

man, of Chicago, left the following short will: "I give everything to my wife"; whilst another short will proved in Waterbury reads thus: "I give all my property to F. W. Johnson." In Brooklyn a will was proved containing just eleven words, including the testator's signature. Another short will was made by Mr. Borckhardt, of St. Albans, who perished a few years ago on the Matterhorn. He wrote it in pencil on a small piece of card, addressed to his sister. It was as follows: "I am dying on Matterhorn. I leave all I possess to you, my dear sister. God bless you."

826. Where is the largest dynamo in the world?

The armatures of the monster dynamos built by the Westinghouse Company for the World's Fair weighed about 21 tons each, and were about 7½ft. in diameter. The total weight of the twelve dynamos was 900 tons, having a maximum capacity of 180,000 lights, and requiring engines with an aggregate of about 12,000 horse-power to work them. The dynamos of the Deptford Central Station, London, are, however, the largest and most wonderful electrical machines in the world. The armature ring for each of the 10,000 horse-power dynamos measures 35ft. in diameter. It is made of cast-iron in eleven pieces. The armature and shaft weigh 225 tons, and the field magnets 350 tons more. This is exclusive of the massive bed-plate on which the engines and field magnets stand. To give a slight idea of the extraordinary size of the engines to be employed for driving, the measurement from the ground to the top of the high-pressure cylinder is 48ft. The over-all dimension of the dynamo is 45ft., and of this 16ft. is below the floor level. St. Louis, U.S.A., boasts the possession of the largest electric central station in the world. In it seventy-five dynamos may be seen at work in a single room. It has nineteen boilers, engines of over 5,000 horse-power, and consumes some 100 tons of coal per day.

827. Has any peer ever held a certificate as master mariner?

Thomas Brassey, born at Stafford in 1836, and created Baron Brassey in the English peerage in 1886, whose voyages over the world in his yacht, the *Sunbeam*, are so well known through the popular volumes written and published by his first wife, was the first yachtsman who obtained a Board of Trade certificate for competency to navigate as a master mariner. His knowledge of the sea has been put to the service of his country, for he is honorary commander of the Liverpool brigade of Royal Naval Artillery Volunteers; was a Lord of the Admiralty, 1880–4; Secretary to the Admiralty, 1884–5;

was a member of the Royal Commissions on Unseaworthy Ships and Colonial Defence; is a director of the Suez Canal Company, and a younger brother of the Trinity House. Lord Dunraven, owner of the *Valkyrie*, which was sunk in a collision with the *Satanita*, after having unsuccessfully contested for the *America* Cup, also holds a master mariner's certificate.

828. Where is the most strangely cut hedge in the world?

Near Steinheim, in Germany, and it can be seen by passengers from the railway carriages as the trains pass the locality. This remarkable hedge gradually assumes the forms of sportsmen, a man on horseback, men quarrelling, a general with his laurel wreath, an elephant, a camel, a llama, a sheep, a deer, goat, etc. In 1863, at Newton Burgoland, a hamlet of the parish of Swepstone, near Ashby-de-la-Zouch, in Leicestershire, had lived fifteen years an eccentric man, whose real name was William Lole, but who styled himself "The Old Hermit of Newton Burgoland," whose trees, walks, squares, beds, flowers, seats, and arbours were all symbolically arranged, with an immense collection of emblems and mottoes. In Bedfont Churchyard there are two large and exceedingly old yew trees, which have been trimmed to resemble peacocks. They bear upon them the date 1704, and the initials of the churchwardens who held office when these curious ornaments were first outlined.

829. Where was the largest sized newspaper in the world published?

The Newspaper Museum in Aix-la-Chapelle contains a copy of the world's largest newspaper, viz., the 'Illuminated Quadruple Constellation,' published in New York, in the year 1859. The paper is similar in form to the surface of a billiard-table, and measures 8½ft. in height by 6ft. in width. It contains eight pages, each of thirteen columns, and these are each 48in. long. The paper on which it is printed is extremely durable and strong, and each ream weighed 3cwt. Forty people were occupied continually for eight weeks in order to bring out the first issue of this remarkable newspaper, which it is proposed to publish once in 100 years. Another large newspaper was the number issued by the 'New York World' on the anniversary of its tenth birthday. It consisted of 100 pages of the usual newspaper size, inclosed in a coloured wrapper, with a design that had been specially executed for the occasion.

830. How is the intensity of light measured?

The measurement of the intensity of light is called photometry, and the instruments used photometers, from the Greek *phos* light, and *metron* measure. The methods by which

the intensity is measured are mostly based upon the fact that it is easy, to approximately detect by the eye when two similar surfaces are equally illuminated. The illumination on a given area of a screen from any light is inversely proportional to the square of the distance between the light and the screen, and this is the foundation of all photometric calculations. Rumford's photometer consists of a screen with a cylindrical rod placed a short distance away. Each of the two lights which are to be compared throws a shadow of this rod on the screen, and the lights are moved until the two shadows are equally illuminated. The ratio of the two lights is obtained by calculating the distances of each from the screen, and taking the ratio of the squares; naturally, the brighter light is the farther away. Bunsen's photometer consists of a screen made of two parts, the one being more transparent than the other. The old form was a paper screen with a grease spot. The grease spot, however, was found to be rather unsatisfactory, so, instead of this, a screen consisting partly of one and partly of two thicknesses of crown glass has been used. Many other photometers have been introduced in recent years with the special object of testing the illuminating power of arc lamps. It is usual to give the illuminating power of any source in terms of the standard candle, the standard candle fixed by Act of Parliament being made of spermaceti, weighing one-sixth of a pound, and burning 120 grains of material per hour. An Argand gas-burner is, however, generally held as the official test-burner for gas.

831. Which missionary still on service has been longest in the mission field?

Mr. Thomas, at present acting as a missionary at Tinnevelly, India, has been in the mission field for fifty-eight years, having commenced his work in the mission field in 1836. The Rev. Richard Birt, of Feeltown, South Africa, has been a missionary for fifty-six years. He sailed for Kaffirland on July 8th, 1838. The Rev. R. Burrows, at present in New Zealand, to which place he was sent by the Church Missionary Society in 1829, has been a missionary fifty-five years. Dr. Muirhead, of the London Missionary Society, has been a missionary in China for forty-two years. The oldest missionary of the Church of England, not of European descent, is Madurendiram Savariroyan, missionary of the Church Missionary Society at Nullamalpuram, near Palamcottah, in Tinnevelly, South India, in the Madras diocese. He was ordained deacon in 1851, and priest in 1859, but undoubtedly worked as a lay missionary for a long while before his ordination.

832. Why do the telegraph wires apparently rise and fall as you pass them in the train?

This optical illusion is caused by the fact that the weight of the wires makes them dip between the supporting posts to a level considerably lower than their points of support on the posts. No wire could bear the strain of being stretched quite level. Some slack to allow for this dip is absolutely necessary. Hence the course of the wires is a succession of curves, with their convexities downwards; and the eye, when rapidly passing them transversely, notes that the wires rise towards the approaching post, and sink as they leave the receding one. The illusion is that the wires, and not we, appear to be moving. A similar illusion may be noted in looking at a field of furrows, if these be at right angles to the railway. In this case, as by the laws of perspective, all receding parallel lines converge to a vanishing point; the furrows appear as the spokes of a huge wheel rapidly revolving, with the vanishing point as its axle.

833. Are there "earth" as well as "sea" tides?

Professor John Milne has recently shown that earth tides occur as regularly as sea tides. He states that the tall buildings upon the earth's surface are being continually moved to and fro, like the masts of a ship upon an ocean. In Germany and Japan, a tide-like movement too great to be produced by lunar attraction has been observed, the ground being gently tilted every twenty-four hours (more at night than by day), and buildings slightly inclined like stalks of corn in a steady breeze. It is suggested than in Japan this movement may be due to the opening and shutting of the crumpled strata forming a range of mountains. Among the other movements of our panting earth are the micro-seismic or tremor storms, which are now defined as long, flat waves like those of an ocean swell, and the bending effect produced in certain districts by change of atmospheric pressure. There are also waves from distant earthquakes, which are appreciable to the senses for only a few hundred miles, but which may extend round the world.

834. When was the summit of Mont Blanc first reached by an Alpine climber?

Horace Benedict de Saussure, Swiss geologist and physicist, born at Geneva on February 17th, 1740, died January 22nd, 1799, and who was elected Professor of Physics and Philosophy in the University of Geneva when only twenty-two years of age, offered in 1760 a prize for the discovery of a practical route to the summit of Mont Blanc, the highest mountain in

Europe, reaching to 15,781ft. above the level of the Mediterranean. This prize was won by Jacques Balmat, a guide, in 1786, with whose assistance the following year Saussure reached the summit of the mountain, the first "traveller" who did so. The first snow mountain to be climbed was the Titlis, in 1739. Pococke and Windham's visit to Chamounix followed in 1741, and with that the modern epoch of Alpine exploration commenced. The Jungfrau was climbed in 1811, the Finster Aarhorn in 1812, and other peaks followed. It was not till after Albert Smith's ascent of Mont Blanc in 1850 that Alpine climbing became systematic. Mr. Justice Wills's ascent of the Wetterhorn, in 1854, was usually regarded as the first important "sporting" climb. From that time forward the exploration of the Alps advanced rapidly. Monte Rosa was climbed in 1855; Mont Blanc, without guides and by a new route, in 1856; while in 1857 the Alpine Club was founded in London, and the example thus set was shortly afterwards followed by foreign mountaineers.

835. Who was the first Jew who held a commission in the British Army?

This was the gifted but erratic Joshua Montefiore, uncle of the late Sir Moses Montefiore. He was by turns notary, author, explorer, soldier, and journalist. In 1803, George III. offered him a knighthood, but he declined it. He was in charge of the military arrangements connected with Philip Beaver's unfortunate expedition to Bulama, on the West Coast of Africa, and in 1809, as an officer in the York Light Infantry, participated in the taking of Martinique and Guadeloupe.

836. Where on the British coast is the most valuable fishing ground?

Of sea fish, a greater value of herrings is landed on the coasts of the United Kingdom than of any other fish; and 60 per cent. of the herrings taken are landed on the Scotch coasts. The most valuable herring fishing ground, so far as this country is concerned, is in the North Sea, off the coasts of Caithness-shire, its county town—Wick, at the entrance of Wick Bay—being the centre of the Scotch herring fishery. The haddock takes the leading place in point of value in respect of fish landed on the coasts of England and Wales, and the most valuable fishing ground for haddock is also in the North Sea, off the east and north-east coasts of England; Grimsby being the chief centre of the east coast fisheries. In respect to other descriptions of fish, the most valuable fishing grounds are—for cod, the Dogger Bank, midway between north-east England and

Jutland; for mackerel (the leading fish in point of value in the Irish fisheries), the English and Irish Channels, Kinsale being the chief fishing port on the coast of the Irish Channel; for pilchards, the west coast of Cornwall; for soles, the south coast of Devonshire; and for oysters, the Kentish coast off Whitstable. The fishing grounds on the east coast of England equal in value all the other fishing grounds of the United Kingdom put together.

837. Which newspaper had the first "war" correspondent?

The 'Morning Herald,' which at one time was one of the leading London Conservative newspapers. George Borrow, writing to the 'Morning Herald' in 1839, from Spain, was the first newspaper war correspondent; Spain at that time being invaded by Don Carlos, who claimed to be the legitimate Sovereign in lieu of Queen Isabella, who succeeded Ferdinand VII. Borrow also acted as agent of the Bible Society in that country in distributing copies of the Bible in the Spanish language. The term "Special War Correspondent" was first applied to William Howard Russell, when sent to the Crimea by the 'Times.' His first letter home was written from Malta, on 6th March, 1854, and on April 8th he reached Gallipoli. His brilliant letters to the 'Times' raised the circulation of that newspaper from 50,000 to more than 70,000, and vastly increased its influence.

838. Has an English earl ever married a barmaid?

The wife of the celebrated Lord Clarendon, the author of the "History of the Rebellion," was a Welsh pot-girl, who, being extremely poor in her own country, journeyed to London to better her fortune, and became servant to a brewer. While she was in this humble capacity, the wife of her master died, and he happening to fix his affections on her, she became his wife, himself dying soon after, leaving her heir to his property, which is said to have amounted to between £20,000 and £30,000. Among those who frequented the tap at the brewhouse was a Mr. Hyde, then a poor barrister, who conceived the project of forming a matrimonial alliance with her. He succeeded, and soon led the brewer's widow to the altar. Mr. Hyde being endowed with great talent, and at the command of a large fortune, quickly rose in his profession, becoming head of the Chancery Bench, and was afterwards the celebrated Hyde, Earl of Clarendon. The eldest daughter, the offspring of this union, won the heart of James, Duke of York, and was married to him. Upon the death of Charles, James mounted the throne, but a premature death frustrated this enviable con-

summation in the person of his amiable duchess. His daughters, however, were Queen Mary, the wife of William, and Queen Anne, both grandchildren of the former pot-girl from Wales, and wearing in succession the crown of England. Some time ago there were four Marchionesses of Ailesbury living; one of them, Maria Marchioness of Ailesbury, a contemporary of George IV., died recently. The late Marquis married Miss Dorothy Julia Haseley, better known as Dolly Tester, at one time a barmaid at the Brighton Theatre Royal, and subsequently a member of the Gaiety chorus.

839. Who was the first lady to listen to a debate in the House of Commons?

Mrs. Canning, wife of the Prime Minister and distinguished statesman, George Canning, and sister to the Duchess of Portland, was the first lady to listen to a debate in the House of Commons. This was before the days of ladies' galleries, and when those ladies who wished to listen to what was going on had to do so under most trying, unhealthy, and disagreeable conditions. They had to stand in the ventilating-chamber in the roof, and by peering through the shutters they were enabled to see and hear what was going on. In spite of the drawbacks, Mrs. Canning became a frequent visitor when her husband was intending to make an important speech. For two or three years prior to the destruction of the old House of Commons, there was considerable competition for this post of observation. Ladies were given more freedom in the Upper House, having listened to debates and even taken part in them as members as early as the reign of Henry III.

840. Where is the best farm in the world?

This is Longbeach Farm, near Ashburton, New Zealand. The farm was described at considerable length in the 'Agricultural Gazette,' by Mr. Harris, a Devonshire landowner, who spent some time at the Antipodes. About twenty-five years ago Mr. John Grigg bought 30,000 acres of bog from the New Zealand Government, and at once commenced draining it. He sold half of it, but still farms 15,000 acres, the soil of which is extremely fertile. His crops in the 1890 harvest included 4,900 acres of wheat, 2,100 acres of oats, and 280 acres of barley. Although the yield was not so good as usual, the wheat crop averaged thirty-seven bushels an acre. The largest English farm is Withcall Farm, South Lincolnshire. It consists of the whole parish of Withcall, and seventy acres in an adjoining parish. The farm proper contains land as follows: Arable, 2,066 acres; pasture, 430; plantation, 60. There are thirty-six cottages, with good gardens, on the farm, all of which are occupied by the farm labourers.

841. Which is the most notable case on record of a boy adopting the dress and habits of a girl?

This was Omar Kingsley, the famous circus rider, who died in India some years ago. He was born in New Orleans, of Creole parents, and at the age of eight was apprenticed to S. G. Stokes, a well-known circus manager. The boy's singular girl-like beauty suggested to Stokes the idea of transforming him into a girl, and he accordingly dressed him from head to foot in feminine attire, and from that time until his twenty-first birthday he never wore a single article of man's apparel. Stokes gave him the name of "Ella Zoyara," and under that name he soon became one of the most famous and daring circus-riders ever known. Even after his secret was discovered he continued to appear professionally as a woman under his old name of Ella Zoyara. He subsequently abandoned skirts, and rode as a man under the name of Omar Kingsley. Yet his long masquerade had changed his whole nature from a masculine to a feminine one, and he was as emotional and capricious as any woman. Even after coming out as a male rider, he would attire himself in a lady's dressing-gown when at home, and devote his leisure to embroidery or some other variety of feminine fancy work, in every branch of which he was an adept. The sister of the Queen of Servia, although fond of girls, has been blest by the birth of an only son; but to satisfy her love for the weaker sex, she has brought him up as a girl in every respect, allowing his hair to grow down his back, and dressing him in a bodice and divided skirts. In Paris there are several women who are authorized by the police to wear full masculine costume. Among them is a lady artist, a bearded woman, a female house painter, a directress of a printing office, and several others.

842. What is the greatest number of generations in one family known to have been living at one time?

Seven. A correspondent, writing to the 'Standard' in January, 1894, mentioned a visit by him in 1849, in the company of Dr. Feild, Bishop of Newfoundland, who was making a missionary journey to an outlying part of his diocese. He says: "I there saw, in a fisherman's tilt, seven generations, all females. The youngest was a newly-born infant, its mother was 12 years of age; its grandmother 26, and so upward. The age of the great-great-great great-grandmother was such as to render it quite possible that before she died she might see a member of an eighth generation." In Byfield, Newburyport, Massachusetts, there were, in 1887, the representatives of six living generations descended from James

Kent; the oldest member being 95 and the age of the youngest mother being 15. At Skillington, a village near Grantham, there were in 1893 five generations of one family then living, namely, Thomas Duffin, 96; George Duffin, the son, 72; George Duffin, the grandson, 47; Joseph Duffin, the great-grandson, 25; and George Duffin, the great-great-grandson, 6 years of age. Near Laurencekirk there resides a family group of five generations, all alive and in direct descent from mother to great-great-granddaughter. The mother is 81 years of age, and the great-great-granddaughter is just over one year old.

843. Are any pleasant perfumes obtained from substances emitting disagreeable odours?

Animal perfumes, such as civet, ambergris, and musk, although very agreeable and pleasant in their manufactured condition, are all more or less offensive to the smell in their crude state. This is especially the case with civet, which is obtained from the civet, a carnivorous quadruped, a native of North Africa. The perfume is collected in a small pouch and removed from thence about twice a week. The quantity yielded is about a dram at each removal. In any quantity, the odour is overpoweringly disgusting, but, diluted infinitesimally, its perfume is most agreeable. Musk is obtained chiefly from the musk deer, and is contained in a fleshy bag about the size of a hen's egg. The dried musk in each bag averages about one-third of an ounce, and is worth a sovereign in the market. The odour of new musk is so powerful that the dealers are forced to cover their nostrils with thick cloths while inspecting the bags or "pods." This extraordinary perfume is said to retain its pungency after exposure to the air for a hundred years. Ambergris is a morbid secretion of the sperm whale. It imparts a delicate odour to perfumes, but its smell is very offensive when in its crude state. The oil of pine-apples is elaborated from sugar and putrid cheese; and the loathsome fluid produced during the manufacture of whisky, and known as fusel oil, is by one particular mode of treatment made to yield the fragrant oil of pears, by another process oil of apples, and by other carefully-devised methods the essential oil of grapes and oil of cognac.

844. Which artist has the greatest number of studios for different descriptions of work?

The American artist, Mr. Thomas Shields-Clarke, at present resident in Paris, who pursues five different branches of art in five different studios. In his studio in the Rue Dareau he is known as a landscape painter only. Precisely at nine o'clock

every morning he enters this atelier and paints steadily (in oils) for two hours. When the clock strikes eleven, he hurries away to another studio in the Rue St. Honoré. Here he picks up chisel and hammer, dons the sculptor's blouse, and pounds away at a block of marble. Two hours later the blouse and implements of the worker in marble are laid aside, and the artist drives in a cab to the Rue Clement Marat, where, in a third studio, he devotes a couple of hours to water-colour painting. The rest of the day he divides between portrait painting and etching in his other studios across the Seine. Mr. Shields-Clarke is the only artist in the world pursuing his profession in five different workshops. His first Salon picture was a Dutch subject in oils, but in 1894 he exhibited at the Champ de Mars products of his five studios.

845. Has a British titled lady ever driven a passenger train?

The Marchioness of Tweeddale has had this honour. On 24th January, 1890—about a month before the opening ceremony—an experimental train was run over the Forth Bridge, in the neighbourhood of Edinburgh, conveying, amongst other celebrities, Sir Matthew William Thompson, chairman of the Forth Bridge Railway Company; Lord Colville of Culross, chairman Great Northern Railway; the Marquis of Tweeddale, chairman North British Railway; Sir John Fowler and Sir William Baker, engineers of the bridge; Sir William Arrol, the contractor, and Lord Dalrymple. At the southern approach to the bridge the engineman shut off steam, and handed over the management of the locomotive to this aristocratic driver (who occupied a place on the foot-plate). Her ladyship, grasping the regulator handle, turned on steam, and keeping her hold of the lever, drove this interesting train over the entire structure at an average speed of about twelve miles an hour. What heightened the feat was the fact that the rate of progress was not uniform, but suitably graduated, on purpose and for the benefit of the officials scientifically engaged observing the different movements of the various parts of the bridge. The train proceeded across cantilevers and girders amid the cheers of the workmen, and in due course drew up at the northern side of the estuary of the Forth. The Forth Bridge was formally opened by the Prince of Wales on the 4th of March in the same year. Miss Ida Hewitt, daughter of Richard Hewitt, of West Virginia, U.S., drove the first passenger train over the grounds at the opening of the World's Fair at Chicago in 1893, her costume on that occasion being that of a Spanish girl of the 14th century.

846. When was the first trial by jury in England?

The earliest recorded mention of a trial by jury in England is stated by Blackstone to be in the reign of Ethelred I. (866–871), but he admits that the exact date of the establishment of trial by jury in this country is lost in remote antiquity. This mode of trial was universally established among all the northern nations, and so interwoven in their very constitution that the earliest accounts of the one give also traces of the other. Trial by jury only became firmly established on present lines in the reign of Henry II. (1155–1189). Criminal cases were first tried by jury in the reign of John. The Constitution of 1791 established trial by jury in France. Trial by jury began in Russia on August 8th, 1866, and in Spain in 1889. In Scotland, in criminal cases, the number of the jury is fifteen, and the majority of that number give the verdict; and in civil causes the number of the jury is twelve, and they must be unanimous, as in England; but it is provided that, if after three hours' deliberation in any civil cause in the Court of Session nine of said jury shall agree, their verdict shall be taken. As in Scotland, juries in Guernsey, Jersey, and in France decide by a majority. More recently the proportion of two-thirds has been fixed in France. In Russia, only Christians are allowed to serve. A Hindu jury consists of five persons only, chosen two by the plaintiff, two by the defendant, and one by the administrator of justice.

847. By what method do sailors at sea determine their exact position?

By taking observations to ascertain the latitude and longitude in which the ship is from day to day. The latitude is found (each morning and at noon) by observing the altitude of the sun, or its height above the horizon. At the Equator the sun at noon is exactly over the ship, while in the Polar regions it will be very little above the horizon. Having the altitude of the sun, the sailor can get the latitude by a short calculation, in which the chief element to be considered is the position of the sun itself with reference to the Equator, and allowing for the sun's declination. At night the latitude is ascertained on the same principle from the altitude of a fixed star. The method most usual with navigators is, by means of a sextant, to observe the meridian altitude of a star, whose declination or distance from the Equator is known; or of the sun, whose declination at the time may be taken from the nautical almanac; the sum of difference (according to the direction of the declination) of the altitude and declination gives the meridian altitude of the Equator, which is the co-

latitude—*i.e.*, when subtracted from 90deg. leaves the latitude. To ascertain the longitude at sea, two things are required to be known: first, the time, exactly to a second, on board the ship; and, secondly, the time at the same instant, and as accurately, at Greenwich. Great accuracy is indispensable, because, if one hour of time corresponds to 15deg. of longitude, a mistake of one minute will make a difference of fifteen miles in the position of the ship.

848. What is the total number of Jews in the world?

Mr. F. D. Mocatta recently estimated the total number of Jews throughout the world as between eight and ten millions. In Europe there are 5,400,000 Jews. Outside Europe no satisfactory enumeration is possible, but it is probable that Asia contains 300,000, Africa 350,000, the Americas 250,000, and Australia 15,000. There are at least 100,000 Jews in Palestine at the present day.

849. Were ladies ever appointed members of Parliament in this country?

Gurdon, in his "Antiquities of Parliament," says that ladies of birth and quality sat in council with the Saxon Witas. In Wighfred's great council at Becconceld, A.D. 694, the abbesses sat and deliberated; and five of them signed decrees of that council along with the King, bishops, and nobles. King Edgar's charter to the Abbey of Crowland, A.D. 961, was with the consent of the nobles and abbesses, who signed the charter. In Henry III.'s and Edward I.'s time four abbesses were summoned to Parliament, namely, of Shaftesbury, Berking, St. Mary of Winchester, and of Wilton. In the 35th of Edward III. were summoned by writ to Parliament, Mary Countess of Norfolk, Eleanor Countess of Ormonde, Anna Despenser, Philippa Countess of March, Johanna Fitzwater Agnota Countess of Pembroke, Mary de St. Paul, Mary de Roos, Matilda Countess of Oxford, and Catherine Countess of Athol.

850. What do the most expensive opera-glasses cost?

Opera-glasses, costing from £100 to £800, are frequently supplied for wedding presents to brides who have made matches with wealthy suitors. A pair of opera-glasses, studded with turquoises and pearls, a present by a London banker to the Duchess of York, cost £120. The Princess of Wales has a magnificent pair made of platinum and set with sapphires, turquoises, and splendid rubies, which cost nearly £3,000 in Vienna. One of the most ornate of opera-glasses was one made to order for Mr. Singer, of sewing machine fame. It was of solid gold, and above it was a large lyre composed of

diamonds and sapphires, and valued at £12,000. Another very costly pair of opera-glasses was that which was stolen in Paris from the Empress Eugénie. The barrels were composed of magnificent pearls, with a framework of gold.

851. In what part of the world has a man's shin-bone been honoured by a funeral, headstone, and epitaph?

This occurred in Maine, in the United States, where, in a quaint little churchyard, there is a handsome headstone with the epitaph, "Gone, but not forgotten." Years ago a man went off fishing, but never returned. At some little distance of time there was cast upon the shore of the lake where he had fished a shin-bone covered with a piece of red sock. His wife vowed she had knitted that sock with her own fingers. In spite of opposition, the town hearse was brought out, and the shin-bone, sock and all, was carefully placed in a tomb.

852. Which pictures in the National Gallery are most popular with students for copying?

The annual Parliamentary Report of the National Gallery for the year 1893 stated that the popular pictures by modern masters which had been most often copied by students during those twelve months were: "The Parson's Daughter," by Romney, nineteen times; "The Chichester Canal," by Turner, seventeen; "Portrait of Lady Hamilton," by Romney, fifteen; "Spaniels," by Sir E. Landseer, fifteen; "Dignity and Impudence," by the same artist, twelve; "Low Life—High Life," by the same, ten; "Angels' Heads," by Sir Joshua Reynolds, nine times. Of paintings by foreign or old masters, those oftenest copied by students were a "Girl With an Apple," by Greuze, sixteen times; "Head of a Girl," by the same artist, eleven; and "His Own Portrait," by Andrea del Sarto, nine times. Nine others, including modern, foreign, and old masters, were copied eight times each: ten, seven times each; fourteen, six times; fourteen, five times; eleven, four times; and five, three times each.

853. What is the size of the smallest atom that can be seen by the most powerful microscope?

A cube whose side is the four-thousandth of a millimètre (the millimètre representing the one-thousandth part of a yard). Such a cube, according to Professor Clark Maxwell, contains about two million molecules of organic matter. By the aid of the microscope, four million shells have been discovered in an ounce of chalk, and living specimens, only one-millionth of an inch in length, in a drop of water. In 1865

Mr. H. C. Sorby exhibited his spectrum microscope, by which the millionth part of a grain of blood was detected. Christian Gottfried Ehrenberg, the German naturalist and microscopist, detected among the animalcula in a drop of stagnant water the one named *Monas crepusculus*, which is only one twenty-four-thousandth part of an inch in diameter. Dr. Dallinger, President of the Royal Microscopical Society in 1883, found in putrefying meat 2,800 millions of minute living creatures, which would lie in a space equal to one-thousandth of a cubic inch. In 1875, with the highest microscopic facilities then available, he discovered the flagellum, or whip-like rudder of the minutest of the microbes, which is named *Bacterium termo*, the diameter or width of which is $\frac{1}{204000}$th part of an inch. Under a very powerful microscope, a vinegar eel appears like a serpent 100ft. long; while a pinch of flour can be magnified to look like a heap of stones.

854. Where is the biggest wheat field in the world?

This is in Argentina, and belongs to an Italian immigrant named Guazone, whose broad acres are situated in the south of the province of Buenos Ayres. His last crop occupied an area of 66,720 acres, which is a trifle in excess of 100 square miles. The next largest is the Elk Valley Farm, in the United States, in the occupation of Nathan G. Larrimore, which is 10,000 acres in area. In this vast field over a square mile per day is cut, while eighty men are required to shock the grain. Canada boasts of a 4,000-acre wheat field. It is situated at the Bell Farm, in the Canadian North-West.

855. Who is in possession of the most valuable painter's palette?

The National Gallery, which owns the palette used by Turner, the famous artist. Immense sums of money have been offered for this by rich Americans, but the interesting relic cannot be bought. Sir David Wilkie's favourite palette has been presented to the Royal Scottish Academy, and is now in the Gallery at Edinburgh. The most noted collector of palettes is M. Buguet, of Paris, who amongst his treasures has palettes used at one time or other by almost all the celebrated painters of all nations of the latter part of this century.

856. On which dissenting church in this country has the most money been spent?

Paisley now rejoices in having the most costly Nonconformist church in Europe. This structure is a Baptist chapel, with a grand organ and a choir of fifty voices. It has a tower 220ft. above the street level, a marble pulpit, a marble baptistery,

carved oak stalls, and elaborately-carved panels of alabaster. The cost was over £100,000, and there are 800 sittings. The new church is a memorial of one of its former members, Mr. Thomas Coats, of Paisley, erected by the surviving members of his family. The total amount spent in the erection of the Metropolitan Tabernacle was £31,332, and large sums have since been spent upon it during the thirty and odd years of its existence. It is upwards of 140ft. long, 80ft. broad, and 60ft. high, and can seat 6,000 people without crowding. Christ Church, in Westminster Bridge Road, London, cost, with the adjoining school, about £60,000. The Lincoln tower at this church cost £7,000. Union Chapel, Islington, seats 2,000 persons, and cost about £60,000. The dissenting chapel which has cost the least is at Watchet, Somerset. It merely consists of a dismantled third-class carriage placed in the centre of a field.

857. What is the most curious material with which a mattress has been stuffed?

Beards and moustaches. One so stuffed was presented to Prince Louis, subsequently King of Bavaria. At the time of the Prince's birth, his father, who was then only Prince des Deux Ponts, commanded the Alsace Regiment in the service of France, which was in the garrison at Strasburg. A few days after the birth he was astonished to see that all his Grenadiers had cut off their beards and moustaches. On inquiring why they had done so, one of the men stepped forward and said they had determined to beg his acceptance of a velvet mattress for the newly-born Prince, and that they had stuffed it with their beards and moustaches, cut off for the purpose. An American lady utilized her old love-letters in re-stuffing her mattress, while another fair American used her collection of these precious documents for papering her bedroom. Probably the most unique interior for a mattress was a huge musical-box. This belonged to an Indian Prince, who had a bedstead made for him at a cost of £5,000. The musical-box is capable of playing twelve different airs. It begins to play the moment the least pressure has been put on the mattress, and can be stopped by pressing a button.

858. In which country has a lodge of women Freemasons been founded?

In France, where the first lodge of women Freemasons—"La Candeur"—was formed and opened in Paris in 1785, a duchess being the Grand Mistress. Originally, the exclusion of women does not appear to have formed any necessary part

of the rules of the order, as in the "Constitutions of Masonrie,' in the archives of the lodge at York, occurs the following (translated from the Latin): "Then one of the elders takeing the Booke, and that hee or shee that is to be made Mason shall lay their hands thereon and the charge shall be given." It was only after the institution of the Grand Lodges (England, 1717, Scotland, 1736, Ireland, 1721–30) that the ceremonies were changed and women excluded from the order in this country. The exclusion has never extended to Spain, where women were and are admitted into the lodges on equal terms with the men, and take the same share of the work of the order as their male brethren. Women lodges of Freemasons, though not recognised by the governing authorities of the order, still exist in Paris, and in 1894 the sisters of the "Droit Humaine" lodge in that city made a demonstration at the funeral of the "Grand Vénérable" of their lodge, and placed wreaths upon her grave with an inscription. The usually accepted statement of there only having been one lady Freemason on record (the Hon. Mrs. Aldworth, daughter of the Right Hon. Arthur St. Leger) is entirely erroneous, even as applicable to this country, for there have been at least two or three in Great Britain, and several on the Continent; while Mrs. Salome Anderson, in the United States, attained a high position in the order, and was elected a member of the Board of Trustees of the Masonic Temple.

859. What is the greatest distance between any two succeeding stations on a British railway?

Fourteen and three-quarter miles, which, according to "Bradshaw," is the distance between Athy and Kildare, two succeeding stations on the Great Southern and Western Railway in Ireland. There is a distance of fourteen miles between Athlone and Ballinasloe, two succeeding stations on the Midland Great Western Railway Company's main line between Dublin and Galway. The greatest distance between two succeeding railway stations in Great Britain is fourteen and a quarter miles, between Altnabreac and Scotscalder, on the Highland Railway.

860. Has there ever been a shower of spiders' webs?

In his "Natural History of Selborne," the Rev. Gilbert White describes a shower of spiders' webs that occurred on the morning of September 21st, 1741: "About nine, an appearance very unusual began to demand our attention, a shower of cobwebs falling from very elevated regions, and continuing without any interruption till the close of the day. These webs are not single filmy threads, floating in the air in all directions, but

perfect flakes or rags, some near an inch broad and five or six inches long, which fell with a degree of velocity that showed they were considerably heavier than the atmosphere. On every side, as the observer turned his eyes, he might behold a continual succession of fresh flakes falling into his sight, and twinkling like stars as they turned their sides towards the sun." Showers of spiders' webs have also been reported from Vallicita, Calaveras County, California, on November 16th, 1892, as well as from Gainesville, Florida, on September 20th, 1893.

861. What city in the world has the greatest number of public baths?

The City of Tokio, Japan, has 800 public baths, where some 300,000 persons bathe daily, at a cost of about one halfpenny, while almost every house in that city has its private bathroom. The baths are taken generally at a temperature of 110 degrees Fahr. The Arabians, like their kinsmen, the Jews, completely adopted bathing into their manners and customs; and Mahomet enforced it by connecting it with religion. Islam enjoins on its believers a careful preservation of corporal purity, and for this purpose prescribed repeated ablutions. Of European cities, St. Petersburg is famous for its vast vapour baths, to which Russians flock by thousands on Saturday evenings, carrying their own towels with them. The finest public bath is in Vienna; it can accommodate 1,500 persons, and has a basin 578ft. long by 156ft. wide, varying to 12ft. deep. Notwithstanding its enormous size, the water is changed thrice daily.

862. Which composer wrote the largest number of operas?

Nicolo Piccini, who was born in the Neapolitan dominions at Bari, in 1728, produced 134 operas, besides a vast number of masses, cantatas, and detached pieces. His comic opera, "La Buona Figlinola," founded on Richardson's "Pamela," is considered Piccini's masterpiece, and is especially admirable for the originality, beauty, and appropriateness of its airs, as well as for the judicious manner in which the accompaniments are written. Alessandro Scarlatti, born at Trapani, in Sicily, in 1659, and died at Rome on October 24th, 1725, produced 117 operas, besides 200 masses, 3,000 cantatas, various madrigals, and other chamber music. He was the founder of the Neapolitan School of Music, in which were trained most of the great musicians of the last century, and his influence can be traced in the works of almost every composer who has flourished since. Keyser, founder of the National German School in Hamburg, wrote

(1694–1734) over 100 operas. Gaetano Donizetti, born in Lombardy, 1797, wrote sixty-four operas. Amongst them are "Anna Bolena," written in 1830, "La Fille du Regiment" (1840), "Lucrezia Borgia," and "La Favorita." In 1835 he composed the well-known opera, "Lucia di Lammermoor," occupying about six weeks in the work.

863. Which English author's works have the most eccentric index?

Those of Shakespeare, of whose plays there was published in 1805 a most eccentric index by Mr. Francis Twiss. This two-volume index, a colossal monument of indefatigability and perseverance, was adapted to all the editions, and comprehended every substantive, adjective, verb, participle, and adverb used by Shakespeare, with a distinct reference to every individual passage in which each word occurs. After Mr. Twiss had made progress with his work, including all the then published editions, a new edition of Shakespeare's works, in fifteen volumes, appeared, and this he also comprised in his references, wishing, as he said, to profit by the last labours of so acute a critic as George Steevens. The index to the edition of Shakespeare's dramatic works, by Samuel Ayscough, assistant librarian to the British Museum (1790), occupied 700 pages. A work on the "Origin of the Human Reason," by St. George Mivart, has been subject to some very absurd indexing. Mr. Mivart refers on page 136 of his book to some articulate utterances of a certain parrot which sounded remarkably like replies to questions. This anecdote the indexer refers to twice under the letter A, and afterwards under twelve other letters, with most ingenious variations.

864. What is the most remarkable rise in value of a picture ever known?

A jump from 5s. to £2,000, or 8,000 times beyond the original cost, is recorded of a picture recently purchased at Torquay by a dealer. It is supposed to be the work of the eminent old master Guido, or one of the school of Bologna, subject "Goodetta." It appears to have had a singular career. Originally stolen from Rome by some of the French army, it was taken to one of the French villages, where it remained in a merchant's office. A Captain Stubb obtained it and brought it to Torquay, and after his death his daughter disposed of it for 5s., the purchaser in return realizing £2,000. The "Angelus," painted by the late Jean François Millet, in 1859, was sold by the artist for £72; although some authorities put the sum at less than a five-pound note.

Its value, however, rose from its original price of £72 to £23,266 at the Secretan sale at Paris, in 1889, when it was purchased by an American Art Association, and they, after realizing £20,000 by its exhibition, sold it to the French nation at an advance of several thousands of pounds on the enormous price they had given for it. The first purchaser, M. Feydeau, sold it in 1870 for £120 to M. Blanc, of the Monaco tables. He passed it on to Mr. Arthur Stevens, who took it to Belgium, and sold it to M. Van Praet for £200. It then passed through the hands of M. Gravet and M. Papelen, and at length found its way into the gallery of M. Durand Ruel, the picture dealer, who sold it for £5,200 to M. Wilson. On the sale of his pictures in March, 1881, the "Angelus" was put up at an upset price of £5,200, and sold to M. Secretan, the future Copper King, for £6,400. One of the pictures of the Mildmay Collection, purchased in 1893 for the National Gallery, "A View on the Shore of Scheveningen," by Jacob Ruysdael, was sold in 1872, as one of a pair, for £68, and in 1893 realized £3,045. The well-known "Duchess of Devonshire," by Gainsborough, was picked up in a furniture shop in Sloane Street for £60, and ultimately fetched 10,100 guineas under the hammer. In 1878, six of Turner's pictures were put up for auction, and realized over 5,000 guineas each, yet Turner only got £200 each for them.

865. In what country is there a town which pays no rates?

Bavaria, in which the town of Klingenberg-on-the-Main occupies that enviable position. The town makes so much money out of its argil-pits that not only are no rates exacted at all, but every inhabitant receives a yearly sum out of the surplus town funds. In fact, the authorities are not only rich but generous, and on New Year's Day, 1894, they sent an official gift of fifteen shillings to a young Klingenberger who is serving his time with the army in a distant part of Germany. The County Council of the North Riding of Yorkshire decided in 1893 that they would not levy any rates during the next twelve months, the balance at their bankers being so large that they required no more money for a year. Chamaret, a small French township of about 600 inhabitants, received in 1892 a legacy which will for ever relieve it of taxation. The will of an old miser bequeathed them his whole hoarded wealth, 600,000 francs, equal to about £25,000, which will bring in a yearly revenue of about £1,000, sufficient, it is said, to defray all parochial expenses, and leave a surplus of about £400 to be expended as the municipality may determine. The only

conditions to the bequest are that a stone tower, 90ft. high, with a clock and a huge bell, shall be erected in memory of the testator. Taxation seems to be least in China, the average there being only 3s. per inhabitant; the other extreme is France, with 74s. per inhabitant.

866. Which country first used post-cards?

Austria, in which country the post-card system was adopted in October, 1869, and proved very popular, eight million cards being sold in the first year. Most of the other European countries rapidly followed suit, Germany introducing them in June, 1870; Switzerland and the United Kingdom in October, 1870; Sweden and Denmark in April, 1871; Belgium in July, 1871; Norway and Russia in January, 1872; while Greece, Italy, Portugal, and Spain also adopted the system in the course of the seventies. In this country a million and a half cards were sold the first week, and the issue has steadily increased year by year, having risen from sixty millions in 1873 to 128,554,800 in 1883, and to 244,400,000 in 1893. Reply post-cards were first issued on October 2nd, 1882.

867. In what country do means exist of getting books and pamphlets printed at the public expense?

In the United States this can be accomplished through the medium of the 'Congressional Record,' which is equivalent in many respects to 'Hansard' in this country, but with a much wider circulation. A member of Congress prepares a long speech, which he is never called on actually to deliver, and incorporates into it passages from any book which supports his views. The speech is then printed in the 'Record' at public expense. In this way Mr. Henry George's "Free Trade and Protection" was printed entire in the 'Congressional Record' as being part of a long speech by Mr. Johnson of Ohio, and was used as a "campaign document." More recently the Republicans had their innings by filling the pages of the 'Congressional Record' with quotations from Mr. George Gunton's "Social Economics."

868. Which town or city in this country, in proportion to its population, has the greatest number of public-houses?

The town of Drimoleague, in the south-west of County Cork, with a population of 295, has thirteen public-houses, or more than one to every twenty-three of its population. Killarney, with an adult population of 3,136, has seventy-nine public-houses, or over one for every forty adult inhabitants. The town of Narberth, in Pembrokeshire, a maritime county of South Wales,

has twenty-one public-houses per thousand of its population. Blandford, in Dorsetshire, with 16·7 per 1,000, has more in proportion to its population than any other town in England; while Irvine, a seaport in Ayrshire, with 14·6 per 1,000, has a larger number of public-houses in proportion to population than any other town or city in Scotland. In mere point of numbers, London with its immense population heads the list with over 14,000 public-houses; whilst Manchester, so far as England and Wales is concerned, leads with 1,728; and in Scotland, Glasgow heads the list with 1,722 licensed houses. Amongst European countries, Belgium appears to have the largest proportion—140,000, or 1 for every 44 of the whole population; France has 1 for every 100; the United Kingdom, 1 for every 145; Holland, 1 for every 147; and Germany, 1 for every 205.

869. Which living actress has most frequently performed before the Queen?

Mme. Albani (Mrs. Ernest Gye), the celebrated operatic prima donna, whose fame is as great on the oratorio platform as on the lyric stage. Born at Montreal, in Canada, she made her first appearance in London at the Covent Garden Opera House in 1872, and has since scored triumphs in all the cities of Europe and the United States, and before every one of the reigning monarchs of the world. Besides her residence in Kensington, she has a house in Scotland, not very far from Balmoral, namely, Mar Lodge, at Braemar. Once every year Her Majesty visits this celebrated actress at Old Mar Lodge, and takes tea there, and many are the "private appearances" at Balmoral. Mme. Albani has portraits with autographs, and valuable gifts from the Queen, the Princess of Wales, and every Royal personage in Europe, with few, if any, exceptions. The late Emperor William of Germany gave her a gold medal and appointed her Court singer.

870. Was a bridge ever made of coffins?

A bridge of coffins was made by the British troops, during the China War of 1860, on their march to Pekin. A few days after the taking of the Taku ports, the onward march of the British soldiers was intercepted by a river which, through recent rains, had become quite unfordable for artillery and infantry. They had no pontoons, and, therefore, some means had to be improvised for getting across. Several villages were situated a little distance off, and a careful hunt secured a number of unused coffins. These were hauled down to the river and, with the assistance of a few commissariat casks, made most excellent pontoons,

the coffin-lids forming the roadway. Thus, over a bridge of coffins passed a considerable number of the troops to which Pekin, the capital of China, on the 17th of October, 1860, surrendered. A Chinese coffin is a solid, well-made, close-jointed chest. The seams or joints are made air and water-proof by a resinous kind of cement, melted and run well into the cracks. Those who can afford it provide a coffin long before it is wanted, and take the utmost care of it, and this habit proved of great service to the British forces on the occasion referred to.

871. What plant is supposed to shriek or groan when it is pulled out of the ground?

Ancient superstition gives such a character to the "mandrake." It was believed that a person who pulled up a mandrake would instantaneously fall dead; that the root shrieked or groaned when separated from the earth, and that whoever heard that shriek died soon after or became mad. If the root could be dislodged without the destroyer hearing its groans, it became the good genius of the possessor. It is a narcotic plant, grown in the Mediterranean and East, more generally found in Greece. Its qualities were well known to the ancients, their expression, "He has eaten mandrake," signifying a person suffering from sleeplessness or indolence from its effects. From its form of growth the root, when dug up, bears a rude resemblance to the human figure. The ancient Germans dressed and tended their mandrake roots like dolls, and kept them enshrined in caskets, using them as charms and spells against misfortune. Shakespeare refers to the "mandrake's shriek" in "Juliet's Soliloquy," while another allusion to the "mandrake's groan" is made in "Henry VI."

872. Who introduced the cigarette into England?

Several claims have been made for this distinction. The friends of Carlo Pellegrini, the famous caricaturist, declare that he was the first cigarette smoker in this country, while others strongly urge the claims of the late Laurence Oliphant. Cigarette smoking in this country dates back to about 1844. The great impetus to their increased use was caused by the Crimean War of 1854-56, when numbers of our military and naval officers adopted this method of smoking from the inhabitants of Turkey, Malta, Levant, and other parts of Europe. The first person known to smoke cigarettes publicly in the streets was the late Laurence Oliphant, who had resided for many years in Russia, Turkey, and Austria, where the habit prevailed. He commonly used them in 1844.

873. Are there any birds that never build nests?

The cuckoo, though making use of a nest for its eggs, never itself builds one, but invariably deposits its egg in the nest of some other bird. The goat-suckers and stone-curlews build no nest, but merely lay their eggs on the ground, moving them when necessary from place to place. The same plan of doing without any nest and laying the eggs on the ground or rocks is practised by many of the aquatic birds, such as the terns, or sea-swallows, the common skua, many of the puffins, the black-throated diver, and the guillemot. The starling will occasionally deposit an egg on the lawn, from which she will remove it to her nest, but, if interrupted, will frequently leave it and forget all about it. A number of birds deposit their eggs in holes in trees or in the ground, sometimes providing a lining of moss or other soft substance, and sometimes not.

874. In which country are horses blessed in the parish church before they run a race?

Twice each summer, in July and August, the horse-race, or "Palio," and mediæval procession take place in the plaza at Siena. The "Palio" (so called from the banner given as prize) has been run annually since 1650, and is really a contest between the different districts of the town, each of which is represented at the race by nine or ten men in mediæval costume and a horse. Each horse entered for the race must first receive a benediction at the parish church of its district a few hours before it runs. This unique service is attended by great crowds of people, who witness the horse being led up to the altar and there solemnly blessed by the priest. The horses entered for the race are ridden without saddle and stirrup, while each jockey is provided with a heavy whip made of ox sinew, with which he is allowed to strike any rival horseman who is out-distancing him in the race.

875. Have midnight funerals ever taken place in Westminster Abbey?

Several midnight funerals took place in the Abbey in olden times. Queen Anne was buried by torchlight in Henry VII.'s Chapel with great solemnity on Tuesday, August 24th, 1714. The remains of Joseph Addison were interred in Westminster Abbey at midnight on the 26th of June, 1719. Macaulay, in describing the funeral, said that Bishop Atterbury, one of those Tories who had loved and honoured the most accomplished of Whigs, met the coach, and led the procession by torchlight, round the shrine of St. Edward and the graves of the Plantagenets, to the Chapel of Henry

VII. Here the coffin was lowered into a vault beside that of his patron, Montague Earl of Halifax. A number of the Westminster boys held tapers, and by their light the bishop impressively read the Church burial service. Two years later Matthew Prior, the poet, was buried at midnight in the Poets' Corner in the Abbey. Later still the poet Gay found on a midnight in December his last resting-place in the same part of the Abbey. Midnight funerals have also taken place in Peterborough and Lichfield Cathedrals. The most recent instance was that, in 1891, of Colonel Richard Dyott, who for fifteen years had represented Lichfield in Parliament.

876. What is the simplest way to tell iron from steel?

The simplest way to tell iron from steel is to pour on the metal a drop of nitric acid, and allow it to act for one minute. On rinsing with water a greyish-white stain will be seen if the metal is iron; a black one, if it is steel. The reason the metal goes black is owing to the fact that the pure charcoal (carbon) in it is set free by the action of the acid, and, therefore, changes its colour. Different kinds of steel have different quantities of carbon in their composition, the mildest steel from 0·15 to 0·4 per cent., and the hardest from 1·2 to 1·6 per cent.

877. What is the highest money value of any prize ever run for on a British racecourse?

Twelve thousand pounds, the value of the Lancashire Plate, run for in 1889, and won by the Duke of Portland's Donovan. The Sandown Park Eclipse Stakes, founded in 1886, was in 1889 worth £11,160, and was won in that year by the Duke of Portland's Ayrshire. The Prince of Wales's Stakes at Leicester in 1889—£11,000—was won by the Duke of Portland's Donovan. The Grand Prix de Paris Stakes in 1893 amounted to £10,677, being won by the French horse Ragotsky. The highest amount ever won by a horse during one year was £61,181, won by Stockwell in 1866. Mr. H. McCalmont in 1893 won £25,431 by his horse Isinglass. In 1889 the Duke of Portland won by all his horses £73,858.

878. Who spent thousands of pounds to avoid payment of twopence?

Richard Grosvenor, second Marquis of Westminster, whose son was created the first Duke of Westminster, and whose annual rent-roll is over three-quarters of a million. Like many other rich men of the period, the Marquis was noted for the prevailing shabbiness of his attire and his objection to trifling expenditure. He was especially distressed at being obliged to

pay 2d. every time he rode through a toll-gate outside one of the lodges of Eaton Hall, his splendid country mansion. To put an end to this annoyance, he spent several thousands of pounds in building stables beyond the toll-gate, in order that he might mount his horse and take his ride without payment of the impost. In 1845 an action was brought by a Scottish farmer against the Customs authorities for a wrongful levy of a penny. He gained the day after a trial which lasted two whole days, and during which a good deal of expert evidence was given. With his penny he recovered £150 costs, but probably he would have about as much more to pay before he was clear of his own lawyers. The Customs authorities, in addition to the £150 allowed the farmer, would have to pay the whole of their own costs.

879. Who was the first "lady" electrical engineer?

Miss Millicent Fawcett, who in her University career distinguished herself by taking a place above the senior wrangler in 1890, subsequently adopted the profession of an electrical engineer. Miss Mary Bryant, a distinguished student of the London University and the Durham College of Science, has also attained distinction in the same vocation. Chicago, in 1890, possessed a lady engineer who had successfully passed the ordeal of a rigid examination. She was not let off easily because she was a woman, but, in fact, her examination was more severe than usual. She walked into the Board of Examiners' room in the City Hall, presented her application, deposited the official fee of two dollars, and then made her way into the line of applicants to await her turn. When the examination was finished, the examiners wrote at the end of the paper "accepted," and Miss Annie de Barr is now a fully-fledged engineer. Edison, the great inventor, prefers women machinists for the delicate details of his electrical machines. He says that they possess a finer sense about machinery in one minute than most men attain during their whole lives. He proves his faith in his own statement by employing 200 of the female sex in his works.

880. In which law case appeared the greatest number of witnesses?

In a lawsuit which commenced on the 15th of September, 1768, and concluded at the beginning of 1890, after lasting about 121 years. Bishop Bemetra, of Neutra, in Northern Hungary, died, leaving his immense estates to his family. Owing, however, to the Turkish invasion of Hungary at that time, the Bishop's relatives were unable to take possession of the property. After the invasion it was found

that the number of persons who were claiming a share in the property was upwards of 1,000. Being unable to agree, they went to law, one generation fighting the other, till the number of claimants in the case increased to more than 2,000 before a decision was arrived at. Out of a quarter of a million only £2,000 was left, giving the successful heirs only a sovereign each. In the case of the 'Times' against Mr. Parnell and sixty-five other members of Parliament, the judges sat for 129 days, finishing on the 22nd of November, 1889, after having examined 493 witnesses. In the case of the trial in 1872 of the Claimant, Roger Charles Tichborne, for perjury, which lasted 188 days (the longest trial on record in this country), 385 witnesses were examined, and the prisoner being convicted, was sentenced to fourteen years' penal servitude.

881. Has the working of a man's heart ever been visible?

It is quite possible to make the working of a man's heart visible. M. Marey, the well-known investigator of animal movements by instantaneous photographs, combined in the zoetrope, has succeeded in showing to the eye the beating of a turtle's heart. All the phases of the movement can be readily followed and properly examined by this new method. A man is now living in New York whose present occupation is that of exhibiting his beating heart to members of the medical profession. Some time ago he underwent Eastlander's operation for an abscess in the pleural cavity, the result being to save his life, but to leave him with a cavity as big as a man's fist in the left side of his chest, through which the pulsations of the heart are plainly visible.

882. Has a dredger of solid rock ever been used successfully?

Such a dredger has been successfully used by S. Pearson and Son, of Westminster, in making a new channel leading to the harbour of Alexandria, which had to be cut for a width of 300ft. through a series of ridges of solid rock extending for about a mile in an open seaway. The prevalence of a heavy swell greatly added to the difficulties of the work, which, however, was accomplished practically without the use of explosives, and constitutes a unique example of rock dredging. Messrs. Pearson, after the completion of the work, disposed of the dredger to the Government. Having subsequently taken a contract for excavating a channel through the rock at Bermuda, the firm have had a new and more powerful solid rock dredger built, which embodies various improvements suggested by their experience at Alexandria and elsewhere. Amongst ordinary dredgers, the largest yet made is that in use on the Mersey,

320ft. long—capable of raising 4,000 tons of sand per hour. By the aid of these machines the main channel for entering the Mersey has been deepened from 11ft. to 17ft.

883. Can a number of sheets of clear glass be placed in such relation to each other as almost entirely to prevent light passing through them?

An account of how this apparently puzzling feat can be performed has been given in an American scientific paper. Place eight or ten sheets of clear glass parallel with each other, and arrange them at an angle of 35deg. 25min. (the complement of the polarizing angle) with a given plane. Then place a similar lot of plates at the same angle with the plane at right angles to the first. In the first lot of plates of glass, about one-half of the light is reflected to one side, while the remainder, which is polarized, passes on and is practically extinguished in the second lot of plates.

884. Which English flower changes colour if placed in a room lighted by gas?

The pale yellow colour of the primrose, when seen in a room lighted by gas, becomes perfectly white, while the blossoms of white azaleas turn a pale blue. The lighter and more delicate tints of geraniums and pelargoniums change from white to pale yellow, scarlet change to pale pink, and hawthorn blossom loses its pure white tint and changes to yellow or light pink. A remarkable effect of tobacco smoke on the colour of flowers may be seen in the case of the field scabious, named botanically *Knautia arvensis*, so frequent on the hills and commons from August till October. If its purplish blue blossoms, which form nearly globose heads, are held in the smoke of tobacco, their colour will soon turn to a bright green, about the same as the colour of its leaves.

885. What is the size and weight of the largest block of granite ever quarried?

Recently a block of granite, weighing 1,217 tons, was used as the pedestal of the equestrian statue of Peter the Great at St. Petersburg, having been transported four miles by land over a railway and thirteen miles in a caisson by water. The railway consisted of two lines of timber furnished with hard metal grooves, between which grooves were placed spheres of hard brass about 6in. in diameter. On these spheres the frame with its load was easily moved by sixty men, working at capstans with treble-purchase blocks. Another huge block, measuring 35ft. by 16ft. by 14ft., was recently taken out of the Craigfair Quarries, near Dalbeattie. Its weight was

estimated at 650 tons. A block of granite measuring 97ft. by 81ft. was blasted some time ago from the quarries of Monte Grassi, Baveno, Italy. The obelisk of St. John of Lateran, now standing at Rome, is 105ft. high without the pedestal, and weighs 440 tons. Cleopatra's Needle, placed on the Thames Embankment in 1878, is 68ft. 5½in. high, and the base is 7ft. 10½in. by 7ft. 5in. It weighs 186 tons. Recently there were executed twelve columns for the Church of St. Paul, Rome, the length of each being 33ft., and the weight of each being 38 tons. The blast which removed these enormous blocks was composed of 17 tons of blasting powder and half a ton of Nobel dynamite. This blast removed blocks of almost incredible size; one is said to have weighed 50,000 tons. The largest blasting operation ever undertaken was at Hell Gate, New York Harbour. The final blast shattered 270,717 cubic yards of rock, and the cost of this single explosion was £22,190. The work lasted from June, 1875, to October, 1885, when the final explosion took place. The total cost of the whole improvements at the harbour was £1,070,950.

886. When was England first divided into shires?

The earliest mention of shires was in the time of Ina, who reigned in Wessex from 688 to 727. The shires were formed by the subdivision of Mercia, Wessex, Northumbria, and other Saxon kingdoms. The shire represented in its constitutional machinery either the national organization of the several divisions created by West Saxon conquest, or that of the early settlements, which united in the Mercian kingdom as it advanced westwards, or the re-arrangement by the West Saxon dynasty of the whole of England on the principles already at work in its own shires. The division of England into shires, which was begun before the time of Alfred, was not fully completed till the Danes, Angles, and Saxons were united into one kingdom under Edgar. In the government of the shire there were two officers, the ealdorman and the scir-geréfa, or sheriff. Prior to Alfred's time the divisions of the shires appear to have been uncertain, and to have varied from time to time. The word "shire" was not always synonymous with "county," as two districts within Yorkshire are called shires, namely, Richmondshire in the North and Hallamshire in the West Riding.

887. Are there any animals that never drink?

Several species of reptilia, serpents, and lizards, and certain batrachians, exist in regions remote from water, and derive their necessary moisture from absorption and inspiration,

taking no perceptible quantity through the mouth. The wild llamas of Patagonia are said not to drink, because in the locality they inhabit there is nothing but salt water to be found. Sloths are also said to live without drinking. Rabbits have also been credited with this power, but the late Rev. J. G. Wood recorded the fact that they feed on herbage when laden with dew, and in this way do their eating and drinking at the same time. A stony, waterless region of France has evolved a race of animals that do not drink. The sheep feeding upon the fragrant herbs have altogether lost the habit of drinking, and the cows drink very little. Roquefort cheese is made from the milk of non-drinking cows. The camel has been known to go twelve or fourteen days without water, carrying 300lb. and sometimes 400lb. weight. A parrot is said to have lived in the Zoological Gardens, Regent's Park, London, for fifty-two years without a drop of water.

888. What is the highest price ever paid for a butterfly?

Five hundred pounds, which was the cost paid by a late collector to obtain an extremely rare butterfly brought from the Gaboon River, in Western Africa. This sum was paid to a special collector as expenses incurred in obtaining a specimen; he took two years to find it. Only two specimens are known to exist of the female of this butterfly. Fifteen hundred dollars, or about £300, was the price paid by the Smithsonian Institute, at Washington, for a butterfly of an unusual species, found by a young man while camping out in the Sierras of the United States. It was an individual fossil species, supposed to be extinct, and its reception, therefore, at the institution caused considerable excitement at the discovery that one of the race had been found alive. One hundred and fifty pounds was paid for a beautiful specimen of the giant butterfly, *Papilio Antimachus*. A celebrated collector, Baron Felder, formerly burgomaster of Vienna, sold his collection of butterflies to Lord Rothschild for £5,000. Baron Felder parted with his collection (being seventy-eight years old), so that after his death it might not be broken up.

889. Which strike in this country lasted for the longest period?

The strike of engineers at Sunderland, which came to an end in November, 1885, after having lasted two and a half years, and cost over £200,000 A great strike of colliers took place in April, 1867, near St. Helens, about 4,000 men being on strike, which lasted exactly one year. In 1854 all the mills in Preston were closed at the end of October by strike, through which

about 17,000 persons remained idle for thirty-six weeks, or nearly nine months. The total funds contributed by operatives during that period to support the strikers amounted to £97,000. The strike of masons in London employed in erecting the Law Courts and other buildings, demanding increased pay and fewer hours of work per day, commenced on July 31st, 1877, and lasted till March 14th, 1878, or almost eight months. Some firms yielded about September 20th, 1877. Germans and other foreigners were introduced and employed between October and December of that year. But the strike still lasted on, costing about £60,000. The great cotton strike of 1878 is estimated to have cost the workpeople £2,700,000 in wages. Mr. Bevan, in the 'Statistical Society's Journal' for March, 1880, estimated that 110 strikes, of which the results were reliably known, enforced 577 weeks of idleness, and cost £4,468,950 in wages alone. The average duration per strike in the labour disputes of the following three years was, according to the 'Labour Gazette,' as follows: 1893, 18 days; 1892, 31 days; 1891, 24 days.

890. Is boiling water always of the same temperature?

It is only when the barometer stands at 30in., showing atmospheric pressure of 15lb. on the square inch, that the boiling-point of water is 212deg. When the barometer falls, or when part of the pressure is in any way removed, it boils before coming to 212deg., or when the pressure is increased the boiling-point rises. Thus, in elevated positions, where there is less air above the liquid to press on its surface, the boiling-point is lower than at the level of the sea. An elevation of 510ft. above the sea-level makes a diminution of a degree, and at higher levels, with the difference of elevation, there is a corresponding lowering of the degree of temperature at which water will boil. At the City of Mexico, in North America, which is 7,000ft. above the sea, the boiling-point is about 200deg.; at Quito, in South America, which is 9,000ft. above the sea, water boils at 194deg.; and on Donkia Mountain, in the Himalayas, at a height of 18,000ft. above the sea, Dr. Hooker found water would boil at 180deg. Boiling water is therefore not always equally hot, and in elevated places many substances cannot be cooked by boiling, because the heat at which water boils is not sufficiently great to produce the effects of cooking which the food requires. The attraction of a fluid for the surface of the vessel in which it is boiled has also an influence on the boiling point. For instance, when the barometer is at 30in., water boils in a metallic vessel at 212deg., in a glass vessel at 214deg., while in a vessel varnished inside

with shellac the heat may be raised to 220deg. before ebullition takes place. Water containing salt, sugar, or other substances in solution also requires a higher temperature to boil it.

891. Where is there a festival held yearly in honour of a tooth?

On a foliage-covered hill, just outside the walls of the city of Bangkok, a yearly festival is held in honour of the sacred tooth of Buddha, a replica of which, brought from Ceylon, is kept in a shrine at the summit. The hill is a small one, in fact, it is an artificial brick-built hill, but yet, as the only hill-like eminence for miles around, it is regarded with great reverence by the natives, and called by the dignified name of the "Golden Mountain," and the temple in connection with it is called "Wat Saket." For a few days towards the end of November, every year, the people flock to the shrine to visit the holy and sacred relic, and the visit forms the occasion for a great deal of innocent merry-making and jollity. In Ceylon another famous tooth of Buddha is worshipped, and draws enormous crowds of devotees. In the fifteenth century, a Royal devotee in Ceylon offered 6,480,320 flowers at the shrine of the tooth. The Cingalese worship a monkey's tooth; the Malabar Islanders an elephant's; the Tonga Islanders a shark's tooth; while some of the Siamese worship the tooth of a sacred monkey.

892. Where is the biggest brewery in the world?

In Dublin, where, at St. James's Gate, the biggest brewery in the world is carried on by Messrs. Arthur Guinness, Son, and Co. Their report for the year 1893 shows that this single firm paid excise duty to the amount of £544,709, which was £22,460 more than they paid in 1892. The area of the brewery, which in 1860 only covered four acres, now covers between forty and fifty acres. The huge vats, in long avenues, number 150, ranging in holding capacity from 200 to 1,700 hogsheads. The firm have 150 of the best Irish and Clydesdale horses, and employ 1,600 men. Messrs. Bass, Ratcliffe, and Gretton's brewery at Burton-on-Trent occupies 150 acres, and to go over the grounds a railway is provided, with a length of sixteen miles. The store-house in connection with the brewery for storing hops and ale is the largest store-house in the world. It is three stories high; each floor covers two acres. The firm use for bottles over 150,000,000 labels each year, and spend over £8,000 in show-cards. The sum of £4,080,000 is invested in this gigantic business. In 1889 it paid £331,950 in duty to the Government. Its profits are about £350,000 per annum. It turns out over a million barrels a year, each holding thirty-six gallons; employs about 2,600 people, and

pays in wages £3,000 every week. Messrs. Samuel Allsopp and Sons', Limited, breweries, erected in 1860, cover fifty acres. Messrs. Worthington and Co.'s establishment, started in 1850, occupies an area of about thirty acres. The biggest brewery in London is that of Messrs. Barclay, Perkins, and Co., Southwark. The brewery stands upon twelve acres of land, a portion of which occupies the spot where the old Globe Theatre once stood. Over 700 people are employed there.

893. Have skates made of bone ever been used in this country?

The learned English monk, William Fitzstephen, who died about A.D. 1191, in his "Description of the City of London, and of the Manners and Customs of its Inhabitants," tells us that it was customary for the young men of his days to fasten the leg-bones of animals underneath their feet by means of thongs, and slide along the ice, pushing themselves by means of iron-shod poles. In Moorfields and about Finsbury, in London, specimens of these primitive skates have been from time to time exhumed, and a pair of them are preserved in the British Museum. Wooden skates shod with iron were introduced from Holland, and Evelyn, under date 1662, describes how "divers gentlemen performed before their Majesties on the new canal in St. James's Park with scheets after the manner of the Hollanders."

894. On which public garden in this country is the greatest amount of money expended every year?

The Royal Botanic Gardens, at Kew, near London, cost in the year 1893, £21,779, or on an average for three recent years, £20,850 annually. In the strictest sense they are public, for the admission to them is gratis, and their expense is provided out of a Parliamentary grant from the taxes. These gardens cover about seventy-five acres, and the pleasure grounds connected with them extend over 240 acres. The gardens are beautifully and scientifically cultivated. In their hot-houses is the most perfect collection in the world of all manner of orchids, ferns, cactuses, and other tropical plants and trees. The palm-trees grow to the roof of the palm-house, which is 64ft. in height, and 362ft. by 100ft. in area, resembling a tropical forest, for bananas, cocoa-nuts, cotton, ginger, nutmegs, and cloves all flourish there. In 1871, the Meteorological Observatory, which had been purchased by Mr. J. P. Gassiot for £10,000, was presented to the Royal Society, and placed in these gardens. In 1882, the late Miss Marianne North presented her collection

of pictures of fruit and flowers of all nations, painted by herself, all over the globe, and placed in a building erected at her own expense, open to the public. Close upon 2,000,000 visitors passed through the gates in 1893. The expenditure upon Kensington Gardens is about £7,000 every year. At a meeting of the Bournemouth Town Council recently, it was stated by the Town Clerk that the year's expenditure on the Winter Garden had been £14,000, which included £5,000 for bands and vocalists. The expenditure by the London County Council on the parks under their charge for the year 1893-4 was £92,438, the expenditure on music exceeding £5,000. The two parks under their charge costing over £10,000 a year in maintenance are the Victoria Park, £11,091, and Battersea Park, £10,520. Between £4,000 and £5,000 is expended yearly on the Edinburgh Botanic Garden and Arboretum.

895. Which is the most comfortable prison in the world?

The Massachusetts Reformatory, at Concord, in the United States, conducted on "the collegiate system," is entitled to this distinction, though its inmates include the worst kind of criminals. Five years is the maximum period of detention and this may by good behaviour be reduced to eleven months. While there, lectures on political, religious, social, trade, and personal subjects are delivered to the prisoners, chiefly by clergymen and professors, more than once a week. There are classes for the study of political economy, music, mathematics, and architectural drawing, in which last the class execute free-hand designs in terra-cotta, plaster, and stucco; also designs for internal and external house decoration in wood, iron, stone, and copper; with periodical examinations. There are also a debating society, scientific and literary club, and athletic society; a farm of 100 acres worked by the prisoners, with eighty-three head of cattle and 500 swine; also a printing office and a weekly newspaper.

896. Were Jews during any period expelled from this country?

The Jews were expelled from this country by Parliament in 1290, in the reign of Edward I., and not recalled till the time of Oliver Cromwell, in 1650, their banishment having lasted 360 years. In 1492 half a million Jews were driven out of Spain, and 150,000 from Portugal. Jews at the present time in this country are upon a perfectly equal footing with other British subjects. In 1833, Mr., afterwards Sir, Francis H. Goldsmid was the first Jew called to the British Bar, and, in 1858, the first to be made a Queen's Counsel. In 1835,

David Salomons was elected the first Jewish sheriff of London, and an Act was passed on June 24th to enable him to fill the office. In 1841, Sir Isaac Lyon Goldsmid was created the first Jewish baronet. In 1846 an Act was passed to relieve Jews elected to municipal offices from taking such oaths as were inconsistent with their religion; and another Act, in July 1858, after many unsuccessful attempts, was passed by resolution of the House of Commons to enable a Jew to take his seat in it, when Baron Lionel de Rothschild took his as member of Parliament for the City of London. On February 29th, 1868, Benjamin Disraeli became Prime Minister of England. In November, 1871, Sir George Jessel, a Jew, became Solicitor-General, and on August 29th, 1873, Master of the Rolls. In 1885, Sir Nathaniel Mayer de Rothschild was created a baron, the first Jewish peer of the United Kingdom.

897. At which case were the greatest number of physicians on record in consultation?

The mother-in-law of the Mikado of Japan recently had an attack of serious illness, and so grave were the symptoms considered to be that 423 physicians were at once summoned to a consultation on the case. These medical specialists being so numerous, the operating theatre of the largest hospital was set apart as their consulting-room. The patient being unable to get any precise opinion from this host of experts, called for the consolations of religion, and a Buddhist priest was commanded to attend. This ecclesiastic soon announced his discovery of what had puzzled the 423 physicians, by pronouncing the cause of the malady to be the introduction of railways into Japan, an opinion which the medical experts at once hastened to indorse.

898. When did actresses first appear on the stage?

About the time of the Restoration, previous to which the female parts in each drama were performed by men. The first Englishwoman who appeared on the regular stage was Mrs. Coleman, who, in 1656, performed the character of Ianthe, in Sir William Davenant's "Siege of Rhodes." Previous to that time, Royal and Court ladies had frequently taken part in masques and pageants performed at the palaces. Charles II., in 1662, granted a license for a theatre in Dorset Gardens, London. One of the clauses of this license was as follows: "Whereas the women's parts in plays have hitherto been acted by men in the habits of women, at which some have taken offence, we do permit and give leave for the time to come that all women's parts be played by women." The last male actor that took a woman's character

on the stage was Edward Kynaston, noted for his beauty (1619–1687). Among the ancient Greeks, actors were so highly esteemed as sometimes to be sent on embassies, and authors frequently performed in their own plays; but at Rome, if a person became an actor, he forfeited his right of voting as a Roman citizen.

899. Which European kingdom has only one Minister?

Such is the case with the German Empire, founded in 1871. By the terms of its constitution, dated the 16th of April in that year, the supreme direction of military and political affairs is vested in the King of Prussia, who in this capacity bears the title of Deutscher Kaiser. Under the Emperor, the Imperial Chancellor (General Count von Caprivi de Caprera de Montecuculi) is supreme, being, according to the Imperial Constitution, sole Minister of the Empire. Finland can boast of having only one Minister. The Czar of Russia is Grand Duke, and is represented by a Governor-General, now Count Heiden, while the Ministry consists of one Secretary of State, General Dachn. The other European States with such small Ministries are Brunswick, of which the Regent is Prince Albrecht of Prussia, and the Minister of State Dr. Otto; Mecklenburg-Strelitz, a Grand Duchy, of which the Minister of State is A. Von Bülow; Luxembourg, of which Adolphus, Duke of Nassau, became Grand Duke in 1890, with his only Minister of State, M. Eyschen; Monaco, on the Mediterranean coast, between France and Italy, is governed by a Sovereign Prince, Albert, who has one Minister, the Governor-General, Baron Farincourt.

900. Which of the world's monarchs sets an example of ploughing once a year?

The Emperor of China initiates the year, which commences with the spring, by putting his hand to the plough and turning over a few furrows in the sacred field, in order to impress on the people the importance of husbandry. In each province the highest authority, as representing the Sovereign, performs a similar ceremony. The Emperor, accompanied by his retinue, proceeds in state to the sacred field, at the four corners of which are erected four pavilions, where the seeds of wheat and other cereals are placed. In the centre numbers of magnificently-attired courtiers hold aloft many-coloured flags, while at one side of the passage are scores of aged and white-haired farmers, each with some agricultural implement in his hand. Placing his left hand on the plough, and holding the whip in his right hand, the Emperor begins the ceremony. By pre-arrangement the officers do their allotted share, some

wielding agricultural implements, while others scatter seeds out of the basket, as if sowing, whilst the Emperor is busy with the plough, which is hitched to a richly-caparisoned bullock, draped in yellow, and led by two of the Emperor's body-guard. On the Emperor finishing his round at the plough, the princes also go through a similar performance, and after them nine of the highest courtiers take a turn, and the ceremony is concluded, the Royal ploughman returning to the palace.

901. Where is the finest display of fountains in the world?

In the gardens of the Crystal Palace at Sydenham. The first public exhibition of these fountains took place on the 18th of June, 1856, in the presence of the Queen and 20,000 spectators. The whole system is divided into two series, the upper and the lower. The "upper" series comprises nine fountains, and these constitute the display on ordinary occasions. The "lower" series consists of two water temples, the cascades, and a numerous group of fountains, usually known as the "great fountains," which are only played on special occasions. The two "grand" fountains in the lower series are by far the largest in the world. When the whole series is in operation, 120,000 gallons of water per minute are poured forth by 11,788 jets, and in one single complete display, lasting half an hour, nearly 4,000,000 gallons of water are consumed. The water is supplied from an artesian well 575ft. deep, and forced by steam power to the summit of one of the end towers, 284ft. high, from which it descends to feed the fountains. There are ten miles of water pipes beneath the grounds. The fountains in the palace gardens at Versailles, in France, made for Louis XIV., are on the most magnificent scale. Chatsworth, the seat of the Duke of Devonshire, is remarkable for its fountains. One throws a jet of water 267ft. high.

902. Who owns the most varied and costly collection of walking-sticks?

The Prince of Wales, and Mr. Grover Cleveland, President of the United States, have remarkable collections of walking-sticks. The collection of the Prince of Wales contains several curious sticks brought from India, one of ivory, most elaborately carved. There is also a stick made of the wood from one of the piles of Old London Bridge, which was discovered in the course of some repairs to the present structure. There are in all upwards of 170 walking-sticks in this collection. Mr. Cleveland's collection of walking-sticks includes canes, shillalahs, knuckle-dusters, and stout patriarchal staffs. One

of the sticks, a remarkable hunter's trophy, is a beautifully-made Mosaic, of horn segments, supplied by a specimen of every animal with horns roaming in the State of Texas. The "Andrew Jackson" walking-stick has the Lord's Prayer and a number of democratic sayings engraved in tiny, but clear, letters about its surface. Dr. Hale, of New York, owns the most valuable walking-stick in existence. It is valued at 3,000dols.; the head of this cane contains over 3lb. of eighteen carat gold, and is mounted with sixty-five diamonds. A gold snake, with ruby eyes, entwines the upper part. In the top of the head there is fixed a gold chronometer balance watch, the cover of which is also of gold, studded with twenty-four diamonds, and bears the doctor's monogram.

903. Has a woman ever been employed as a diver?

Miss Jessie A. Ackerman, temperance missionary, had an experience of pearl-diving during her passage from Australia to Singapore. The steamer stopped for two days among the pearling fleet on the great pearling-grounds of the world, far beyond the sight of any land, and where some 1,300 men were engaged in the work. Miss Ackerman put on a diving-dress and went down 60ft. to the bed of the ocean, bringing to the surface some valuable pearls. Two ladies have been exhibiting at the Westminster Aquarium, making dives of 70ft. and upwards into a tank of water. The first lady to accomplish these high dives was Miss Annie Luker, swimming instructress of the Caledonian Road Baths, who is an expert both in diving and swimming. Miss Louie Leonard, of Brighton, in 1894 also accomplished these dives from great heights, and rivalling Professor Baume in the feat of making the dive when secured in a sack, the mouth of which was tied above the head. Another lady-diver, Miss Annie Johnson, in a dive off the North Pier, at Blackpool, stayed under water 3min. 10sec.

904. Which country possesses the finest fire-brigade?

The London fire-brigade comprises 710 firemen, including the chief officer, two assistant-officers, the superintendents, and all ranks; and they are unsurpassed as to courage and skill in the discharge of their difficult and dangerous duties. Their machinery includes nine steam fire-engines on barges, one of which is capable of throwing 1,400 gallons of water a minute; 48 land steam fire-engines; 78 6in. manual or hand-worked fire-engines, requiring 22, 26, 30, 38, or 46 men respectively, which shows them to be very powerful ones; and 221 fire-escapes, and 34 miles of hose; besides all the appropriate vehicles for conveying these about, with 73 coachmen and 133 horses, and 8 steam tugs. The men and machinery

are located at 56 land fire-engine stations and 126 watch-boxes. For communication of information there are 74 telephones between fire-stations, 55 alarm circuits with 546 call points; 21 telephones to police-stations and to public and other bodies; 2 telegraphs, 73 telephones, and 8 bell-ringing fire-alarms. Measured by numbers only, the Paris fire-brigade is the largest, 51 officers and 1,693 men, with 233 engines, 12 barracks, and 124 relief-posts or stations. St. Petersburg has 1,150 firemen; Berlin, 1,090; New York, 1,027; Chicago, 916; Hamburg, 790; which last is first as to the number in proportion to population—305 for every 100,000 inhabitants; while London is at the bottom in that respect, with only 13 for every 100,000. The New York Brigade is the most expensive, costing £337,765 a year; and Boston, U.S., in proportion to population, 6s. 7d. a head, while it is only 5d. in London.

905. Where is the finest artificial lake in the world?

At present this is the great reservoir of Dhebar, in the Rajpootana province of India, which covers an area of twenty-one square miles. This will, however, sink into comparative insignificance when the great Nile reservoir is completed. This artificial lake, when finished, will have a larger surface than the Lake of Geneva, the area of which is 223 square miles, or considerably more than ten times the area of the great Dhebar reservoir. The United States will in a few years' time boast of a lake which will even exceed in area the Nile reservoir. A gigantic dam is being made across the Missouri River. This, when completed, will form a huge lake, having an area of 429 square miles. In Scinde, the Manchar reservoir has an area of 180 square miles when filled by the waters of the river during the rainy season.

906. What is the largest sum ever realized at a bazaar?

On May 5th, 1845, a bazaar was opened in the Covent Garden Theatre, which realized £25,046. The object of it was to obtain funds for the Anti-Corn Law League. The whole area of the pit and stage was boarded over, and transformed into a "Norman Gothic Hall," filled to overflowing with products of manufacturing industry. About 100,000 persons visited the bazaar during the seventeen days that it lasted. The stalls were attended to by 400 ladies, the wives and daughters of leading free traders. A bazaar for the same object was opened at Manchester, on February 2nd, 1842, when the receipts amounted to £10,000; £22,000 was realized at a bazaar in the Free Trade Hall, Manchester, in aid of the Children's Hospital in that city; £21,000 was raised at a bazaar in Dublin, in May, 1892, in celebration of the centenary

of the Masonic Female Orphan School. No fewer than 86,914 people passed through the turnstiles during the five days the fête was kept open. Twenty thousand pounds was raised in November, 1890, at a bazaar in Edinburgh, on behalf of Masonic institutions. The sum of £13,716 was taken at a bazaar held at Glasgow in February, 1890, in aid of a students' union at the University.

907. In which country are most visiting cards sent through the post?

In France, where the custom of sending one's visiting card to acquaintances on New Year's Day, equivalent to the practice in this country of posting to friends Christmas and New Year's cards, is increasing very rapidly. Even the establishment of a society for the suppression of complimentary visiting cards, which has been tried across the Channel, has been powerless against the progress of fashion. The French postal officials have made an interesting calculation, showing the extent and increase of this custom. In the Department of the Seine alone—which includes Paris—eight and three-quarter million visiting cards were delivered by postmen on the 1st January, 1881. The following year it had risen to nine and a half millions; the year after to thirteen millions, and in 1894 to fifteen and a half millions. In Holland it is the fashion to inclose a visiting card with "p.f." (*pour félicité*) in the corner on the anniversary of the birthdays of the sender's friends. This custom prevails also in France and Italy.

908. How many members of Parliament have beer killed in railway accidents in this country?

Four. Previous to the railway accident in the early part of 1894 in which Mr. J. Theobald, member of the Romford Division of Essex, lost his life, three other members of Parliament had been the victims of railway accidents in this country. Mr. Huskisson, the eminent financier and statesman, member for Liskeard, President of the Board of Trade, and Secretary of State for the Colonies, received mortal injuries at the opening of the Liverpool and Manchester Railway on the 15th of September, 1830, and died the same evening. In more recent times, Sir Francis Henry Goldsmid, Q.C. (the uncle of Sir Julian, who succeeded him in the baronetcy), for many years member for Reading, died from injuries received by being crushed between the railway platform and the train at Waterloo Station. In 1890, Mr. Beckett, brother of Lord Grimthorpe, member for Bassetlaw, was literally cut to pieces by a passing train, which caught him while crossing a railway line.

909. What was the size of the largest organ keys ever made for an organ?

Five inches in breadth, which was the extraordinary large width of each key in the organs made during the eleventh and twelfth centuries. The organ of that day was very rude in its construction, and extremely limited in its means. None of the keys were less than 4in. or 5in. broad, and required to be struck by the clenched hand. An ell in length and 3in. broad was the size of the keys of an organ erected towards the close of the eleventh century, in the Cathedral of Magdeburg. This was among the first instruments of the kind provided with keys. The largest organs of the present day have five rows of keys or manuals for the great organ, choir organ, swell organ, pedal organ, and solo organ; each key being rather less than an inch in width, as against the five inches of the twelfth century organs. The keys of the largest organs have on each of them a pressure of twenty or thirty pounds weight, so that it would be impossible to play such instruments were it not for the invention of the pneumatic lever, in which compressed air is made to do the work, the finger having only to set the pneumatic lever in action with a light pressure.

910. Where is the greatest whirlpool in the world?

On the Norwegian coast, in 68deg. N. latitude, and near the Island of Moskenæsoe. This renowned whirlpool, known as the Maelström, is four geographical miles in diameter, and in tempestuous weather its roar, like that of Niagara, may be heard several miles off. It presents the appearance of a rapid current, which runs alternately six hours from N. to S., and six hours from S. to N., producing immense whirls. The depth of the water around does not exceed twenty fathoms, with a bottom of rocks and white sand. A celebrated whirlpool lies off the Scottish coast, between the Islands of Jura and Scarba. It is known as the Corrievrekin; and is occasioned, according to most authorities, by the resistance offered to the tide-stream, in its passage to and from the Sound of Jura, by a pyramidal rock which rises from a depth of about 100 fathoms to within fifteen fathoms of the surface.

911. Which is the most extravagant material used for coat collars?

Fur, some of the most expensive kinds of which are in Russia used in making coat collars. So great is the Russian's love for furs, that £50 is thought no extraordinary price for one of the nobility in that country to pay for a piece of fur of the sea-otter to be made into a collar for his coat, and

sometimes double that price, or even more, has been paid for a single coat collar. The fur of the sea-otter is preferred by many, being supposed or reputed to possess the special property of preserving the breath from freezing. Many gentlemen's coats are trimmed in this country with less expensive skins, costing from £10 to £30 each. Ladies indulge more than gentlemen in fur costumes—some are known to have cost upwards of £2,000; and the coronation robe presented to the Empress of Russia was made of furs valued at £1,200; it only weighed 16oz.—which means £75 per ounce. When George Villiers, the first Duke of Buckingham, went as Ambassador for this country to France, he wore a coat the collar of which was made of white uncut velvet set with diamonds. The value of it was reckoned at £15,000.

912. Has any family had its representatives in the House of Commons for five generations?

The Bedfordshire family of Whitbread have had representatives in the Commons House of Parliament for five generations. Mr. Samuel Whitbread, the present head of the family, has had forty-three years of Parliamentary life, having represented Bedford continuously from 1852. His father, grandfather, and great-grandfather have all represented the Liberal interest in Parliament, and his son, Samuel Howard Whitbread, is now a member of the House of Commons for the Luton Division of Bedfordshire, having been elected on the 29th of September, 1892, at a by-election. Mr. Whitbread's grandfather, who also sat for Bedford, was one of Charles James Fox's ablest adherents. Mr. Whitbread, like his father before him, has more than once refused a peerage. Mr. Gladstone wished to nominate him for the Speakership, but he declined the honour on the ground of being shortsighted.

913. Which town in this country has the best equipped technical college?

Bradford, whose Technical College, one of the handsomest buildings in the provinces, was opened by the Prince of Wales in 1882. The training is excellent in the various departments of art, textile, chemistry and dyeing, mechanical, and engineering. The engineering department is specially notable, with its lecture-room, drawing offices, and workshops, in which a staff of skilled workmen is employed and machinery for all descriptions of work provided. Recently, in fitting up the new electrical engineering laboratory, the shafting required, with hangers, driving gear, pulleys, etc., was designed and made entirely in the department, as well as the switchboards and many of the smaller fittings. Leeds has one of the best

equipped technical colleges in this country, viz., Yorkshire College. It was formally opened by the Prince and Princess of Wales, in 1885. The buildings and equipment cost over £90,000, exclusive of the textile industries department, which is maintained by the Clothworkers' Company of London, who have already spent £30,000 for building and machinery, and have recently voted a further £3,500 for new art rooms. All the departments are fitted in a most complete manner. In the practical weaving course, each student is furnished with a small hand loom on which he can make experiments and weave some of the typical designs received in the lecture course. The fees received from students amount to upwards of £10,000 per annum.

914. Have balloons ever been used for raising sunken vessels?

Mr. Wilhelm Bauer, a submarine engineer, raised in 1863, by means of balloons, the steamship *Ludwig*, which was sunk in the Bodensee in 1861. Two Russian engineers, Nowitzki and Pokrschiewnikitz, have invented a method of raising sunken vessels by means of balloons, and tested their system in August, 1893, by raising a sunken boat in the Weichsel, near Warsaw. The boat lay at a depth of nine mètres (30ft.), and the engineers sent down divers with two waterproof balloons—which were fastened to the sides of the boat, and then inflated with air. The experiment was so successful that they are said to have offered to raise the ill-fated *Victoria*, which sank in 1893 in the Mediterranean. That vessel's displacement is 10,470 tons, and their proposal is to raise her by means of ten balloons, each with a cubic content of 1,700 cubic mètres. The *Victoria* lies at a depth of 138 mètres, which gives a calculated pressure of fourteen atmospheres.

915. Is there any country in which a gentleman must kiss every lady to whom he is introduced?

This custom exists in Paraguay, one of the South American Republics, and every Paraguayan gentleman is bound to kiss every lady to whom he is introduced. On Easter Day, in Russia, kissing all round is the fashion; from the Czar to the lowest peasant the Easter kiss is exchanged throughout the Empire. Some curious kissing customs prevail in our own country. A honorary freeman of the borough of Rye has the privilege of kissing the mayoress; and at Hungerford during the Hock-tide festivities there are two privileged individuals elected yearly, and known as "luth" men, who have the privilege of demanding a kiss from any member of the fair sex they may meet at the fairs. A peculiar kissing etiquette

prevails at the Viceregal Drawing Rooms held at Dublin, it being one of the privileges of the Lord-Lieutenant of Ireland to kiss every lady on her presentation, a practice introduced by George IV. when he visited Ireland in 1821, and maintained by every Viceroy since that date. At Helmagen, in Roumania, there is annually a kissing fair. On this occasion all the newly-married brides are present from all round the district. They are generally attended by their mothers-in-law, and carry jugs of wine. They kiss everyone they meet, and not to take of the proffered wine is regarded as an insult to the young wife and family. In Iceland the men always kiss each other when they meet, but very rarely does a man kiss a woman. The Finnish women resent a kiss on the lips as a most unpardonable affront. Even when offered by an ardent lover it is considered a heinous breach of etiquette.

916. Have any pawnbrokers in this country the privilege of carrying on business without a license?

According to a decision of two modern English judges, the present Sir Arthur Charles and the late Sir James Fitzjames Stephen, every pawnbroker who was in business at the passing of the Pawnbrokers Act in 1872 possesses the right to open as many shops as he pleases, without taking out a license, and to transfer or assign his privileges to anybody he pleases. Since the passing of the Pawnbrokers Act of 1872 every pawnbroker has to pay a yearly license of £7 10s. to lend money on wearing apparel and brokery generally, and an additional £4 10s. to lend money on gold and silver plate and precious stones. The pawnbroker is also required by law to have printed in a prominent place on his establishment, not less than 6ft. from the causeway, the words, "Licensed Pawnbroker." One halfpenny per florin per month is charged for loans of 40s. or under; while for loans over 40s. the charge is one halfpenny for every half-crown. Pawn-tickets are charged one halfpenny for loans under 10s., and 1d. above 10s. Pledges are redeemable for one year, with seven days' grace; but if for more than 10s., they must be disposed of by public auction, according to conditions of the Pawnbrokers Act.

917. Which cyclist has taken most value in prizes in one season?

Mr. A. A. Zimmerman, the value of whose prizes in the season of 1893 was 11,848dols., or nearly £2,370. His prizes included thirty-five diamond pins, rings, and studs, fifteen bicycles, twelve sets of silver-ware, six clocks, eight watches, eleven medals, one pianoforte, two road buggies and a pair of

horses, two bronze figures, two cups, one dressing-case, one gun, one suit of clothes, and a set of tires. The most costly prize was the 1,000dol. gold cup, won at Indianapolis. The piano was valued at 600dols. To obtain all these prizes this cyclist competed at thirty-two race meetings in five different countries, and covered 174 miles on the track in actual racing. Edwards, a well-known professional rider, in one season won twenty-one first prizes, in twenty-five races: a most extraordinary record. Harry Roberts, the Yorkshire champion cyclist, holds a record in prize winning which it would be hard to beat. From April 27th, 1886, to September 18th of the same year, in thirty-three events he won prizes amounting to £373 3s. With the exception of two, these were all first prizes.

918. What is the proportion of female to male heads of families in England and Wales?

Eighty per cent. of these heads of families are males and 20 per cent. females. In London, with its 797,679 inhabited houses, according to the last census, there are in round numbers 926,000 heads of families, of whom 185,000 are females and 741,000 males. The average number of persons to each family is 4·13. In the whole of Scotland there are only 874,007 families, or about 52,000 less than in London alone, the average number of persons to each Scottish family being 4·59, and the average number of rooms to each house 3¼. Of the total population of England and Wales, at the last census numbering 29,001,018, there were 14,950,398 females and 14,050,620 males.

919. What was the weight of the biggest salmon ever captured in this country?

In September, 1887, it was reported that a salmon weighing 86lb. had been captured in the Tay. We read that in 1827 a salmon weighing 83lb. was exhibited in a fishmonger's shop in London. The late Frank Buckland, in his "Natural History of British Fishes," gives a catalogue of the finest salmon which had been brought for his inspection, and of which he took casts. The largest of all was a Tay salmon, weighing 70lb., which was 4ft. 5in. in length. The next was a salmon from the Rhine, 69lb. in weight, and 4ft. 8in. in length; the next from the River Shannon, in Ireland, weighing 54lb. The largest of these three was caught on the Haggis fishing-bank, about two miles below Newburgh, on the Tay. The wholesale price of it was £9. A Royal Chinook salmon, weighing 82lb., was taken in 1893 from the Columbia River, near Clak

Point. This fish was 4½ft. in length, and measured 40in. in circumference. Von Siebald saw a salmon in Russia which weighed 93lb. Forty-five thousand salmon have been caught in three days in the Fraser River, British Columbia, by one fishing and canning firm.

920. Is there any theatre in this country belonging to the municipality?

The theatre at Plymouth is the property of the municipal corporation of that borough. The theatre and hotel, covering, with their annexes, nearly an acre of ground, were erected by the mayor and commonalty of Plymouth at an expense of nearly £40,000. The front has a portico containing eight columns of the Ionic order, 40ft. in elevation. The theatre was described, immediately after its erection, as being the handsomest country theatre in the kingdom, and as being constructed almost entirely of iron. The roof is 64ft. span, and was made at Bristol of wrought iron bars. There are three tiers of boxes formed of cast iron, the fronts thinly cased with wood to preserve the sound. The theatre is now lighted with the electric light.

921. Which are the highest and lowest paid Presidents of Republics in the world?

Those of France and Andorra respectively. The President of the French Republic receives a salary of 600,000 francs (about £24,000), a house to live in, and allowances amounting to an additional 600,000 francs, or in all over £48,000 a year. His term of office is seven years, and he may be re-elected. The Syndic or President of the tiny Republic of Andorra, in the Pyrenees, who is elected for life, receives a salary of £3 a year. The President of the United States Republic, who holds office for four years, receives a salary of £10,000 yearly, and allowances amounting to an additional £12,000. The President of the Swiss Republic, who holds office for one year only, receives a salary of £600 a year. The lowest paid princely ruler is the Prince of Montenegro, whose civil list only amounts to £4,100. The gross amount expended for the support of the ruling powers of the world has been estimated to amount to £15,000,000 a year.

922. Which living preacher has most frequently preached before the Queen?

The Right Reverend William Boyd Carpenter, who was one of Her Majesty's Honorary Chaplains, 1879 till 1883; Residentiary Canon of Windsor, from 1882 till 1884; and Chaplain to the Queen, from 1883 to 1884; in which latter year he was

made Bishop of Ripon. He is considered one of the most eloquent preachers in the Church of England, and usually delivers his sermons without notes of any kind. Even when he delivered his famous Bampton lectures, he did so without ever having written them out. Another cleric who has preached frequently before the Queen is the Bishop of Rochester. The Hon. and Rev. Charles Leslie Courtenay, Rector of Bovey Tracey, and Canon Residentiary of Windsor, has been ten years domestic chaplain. When Her Majesty is living at Balmoral she frequently commands distinguished ministers of the Church of Scotland to preach before her in the parish church of Crathie. Amongst departed Scottish divines her favourite preachers were Dr. Donald Macleod and Principal Tulloch, whilst her favourite preachers amongst living ministers are Principal Caird, Dr. MacGregor, and Dr. Marshall Lang.

923. Has a funeral ever been ordered for a living child?

Such a case occurred in November, 1893, at Cadoxton, in Glamorganshire. The Rev. Ebenezer Morris, rector of Cadoxton, stated that a woman living in the village called at the rectory on a Monday morning and asked to see him. As he was not then at home she left a note, in which she asked him to perform the burial rites in the cemetery at five o'clock on the following day—Tuesday. Mr. Morris ascertained from the sexton that no grave had been prepared, and immediately went to the woman's house and was astounded at discovering that the child for whose funeral his services had been bespoken was still alive, though very weak. In January, 1893, a baby is said to have been nearly buried alive in Cornwall. A mother and infant were supposed to have died, and were placed together in the same coffin. Some time after the child was heard to cry, and was found to be alive. Later the same day the child was once more pronounced dead, but the doctor would not permit of its being buried, and ordered it to be wrapped in blankets for a few days, after which it became well and strong.

924. Who is credited with possessing the most costly lace handkerchief?

Queen Margherita of Italy, whose very delicate lace handkerchief, valued at £6,000, was exhibited at the World's Fair, at Chicago. Three different artists wrought upon it during a period of not less than twenty years. It is so light that one is not conscious of its touching the hand if the eyes be shut, and it can easily be folded into a gold casket not larger than a bean. Some of the wealthy people of San Francisco possess

costly pocket-handkerchiefs. They have their initials worked on these articles in real diamonds. A handkerchief is reported to have been made for a New York millionaire of which the mongram was valued at over £1,500. Some lace intended for the ex-Empress Eugénie cost £5,000 a yard. The Pope has treasures of lace at the Vatican to the value of £175,000. Our own Queen's collection of lace is worth £75,000, and that of the Princess of Wales £50,000. The laces of the Astor family are valued at £60,000, and those of the Vanderbilts at £100,000.

925. Where was the first temperance hall in England built?

The first temperance hall built in England was erected at Bradford, in Yorkshire, in 1837. The first temperance society in England was formed at Bradford, on the 2nd of February, 1830, the chief mover being Mr. Henry Forbes, who had signed the pledge at Glasgow. Bradford's example was speedily followed by the formation of a temperance society at Stockton Heath, near Warrington, on the 4th of April, and one at Manchester on the 12th of May in the same year. Societies were also formed that year at Bristol, Leeds, Liverpool, London, Newcastle-on-Tyne, and York. For the institution of temperance societies, however, we must go back to the sixteenth century.

926. What were the highest prizes ever given at a cat show in this country?

Twenty-five guineas is the value of the highest prize at any cat show, and it was given at the International Cat Show, at the Westminster Aquarium, in March, 1894, which was promoted by Mr. Charles Cruft. Besides a large number of ordinary class prizes at that cat show, there were fifty-one special prizes, ranging in value from five to twenty-five guineas. International Cat Shows have been held for the last twenty-six years at the Crystal Palace, there being at the first show only sixty-five cats, while in 1893 there were close upon 600. At the Crystal Palace Cat Show, in 1889, £1,000 was asked for the cat that won the first prize. This is probably the highest price ever quoted in the cat market.

927. Has a private soldier in the British Army ever twice won a commission from the ranks?

John Shipp, an orphan from the village of Saxmundham, Suffolk, who at Chelmsford joined the 22nd Regiment (Cheshire) of Foot in 1795, performed the unique feat of twice winning a commission from the ranks before he was thirty years old. He was engaged in the Kaffir War of 1800, and afterwards was

sent to India. His regiment made the campaigns of 1804-5 under Lord Lake, and fought at the capture of Dieg, and in the desperate but unsuccessful assaults on Bhurtpore, on 9th January, 21st January, and 21st February, 1805, when the forlorn hope was led by Sergeant John Shipp, H.M. 22nd, who took part in the pursuit of Holkar to the banks of the Sutlej, which ended the war. Sergeant Mansell Fenwick, of the Gordon Highlanders, has been twice commissioned from the ranks. He first entered the 3rd Battalion (Militia) of the Worcestershire Regiment, in which he rose to the rank of captain. He then resigned his Militia commission, and enlisted and served as a private soldier in the ranks of the Gordon Highlanders, winning his way to a commission as second lieutenant in that regiment. The case of Mr. Fenwick was the first instance in which a captain in the Militia had taken the Queen's shilling, though there had been several instances of lieutenants in the Militia having done so.

928. What is the greatest number of cyclists that have passed along any road in this country on one day?

Twenty thousand, being the number of cyclists who passed along the main road through Kingston-on-Thames on Whit-Sunday, 1894. Inspector Trott informed the magistrates on the Kingston Bench to this effect in the course of the hearing of summonses against a few of these cyclists charged with furious driving and riding bicycles without ringing a bell, sounding an alarm, or giving audible warning to foot passengers, to the common danger of the public. On the occasion of the Cycling Carnival held at Herne Hill, on the 27th May, 1893, a procession of upwards of 12,000 cyclists passed along the road from London to take part in the day's sports. On another occasion a procession of 700 cyclists proceeded to Winchester to attend a full choral service given for their benefit. There are upwards of half a million of cyclists in the United Kingdom.

929. Who was in the habit of using a coffin as a bed?

William Edson, who nearly fifty years ago founded the firm of Edson and Sons, manufacturers of church and lodge furniture, at Wisconsin, had many peculiarities, one of the most singular of which was a desire to sleep in his own coffin. In the engine-room of the factory he had made his home for two decades. He had a small apartment fitted up with a few articles of furniture, but these did not include any bed. In place of the bed there was a coffin that stood on blocks. The bottom of the coffin was padded

with woollen cloth, until it made a soft and comfortable place of rest. Every night, for nearly twenty years, old Mr. Edson regularly climbed into his coffin and slept soundly until morning. Charles V., King of Spain and Emperor of the West, one of the world's greatest Sovereigns, resigned his throne to his son Philip II., and early in 1557 retired to a monastery in the province of Estremadura, in Spain. There, in August, 1558, he celebrated a rehearsal of his own death and burial. He ordered his tomb to be erected in the chapel, and causing his domestics to precede in funeral procession, with black tapers in their hands, he followed in his shroud, was laid in his coffin, heard the burial service chanted for him, and joined in the prayers for his soul. This solemnity was soon followed by his actual decease, on the 21st of September, 1558, in the fifty-ninth year of his age.

930. How many yachts are there in the world?

According to 'Lloyd's Yacht Register for 1894,' there are 7,068 yachts in the world, distributed as follows :—

United Kingdom	3,554
United States	1,294
All other countries	2,220

Of the yachts in the United Kingdom, 846 are steam yachts and 2,708 sailing yachts.

931. What is the greatest difference in age between the oldest and youngest sons of the same father?

Seventy-three years, in the case of the sons of Thomas Beatty, of Drumcondra, near Dublin. An Irish magazine published in December, 1806, in announcing the completion by this centenarian of his 102nd year, stated that he walked as upright as most men in the prime of life, and had not lost a single tooth. His eldest surviving son was seventy-three years of age, and his youngest just born, while his next youngest was not quite two years old. A remarkable instance is that of the Earl of Leicester, to whom, in 1893, there was born a son, the Earl being seventy-one years of age. By his two marriages Lord Leicester has become the father of nearly twenty children, and his eldest daughter, Lady Powerscourt, must be about fifty years of age, a great difference between her and her little step-brother. William Prest, of Galphay, near Ripon, died in April, 1789, aged 108. He was a labourer, employed at Studley Park till within ten years of his death. He left a widow and eight of a family, the eldest son being eighty-eight and the youngest sixteen, the difference in their ages being thus seventy-two years.

932. What lady accepted her second husband on the road to the funeral of her first?

Catherine Tudor married John Salisbury, and he died in 1826. In attending his funeral on the 10th of June in that year, his widow was led to church by Sir Richard Clough, and from church by Mr. Maurice Wynn, of Gwedir, who whispered to her his wish to be her second husband. She refused him most civilly, at the same time informing him he was a little too late, since she had accepted the proposals of Sir Richard Clough on her way to church. She assured him, however, that should she lose and bury Sir Richard, he might depend on being her third; and this really happened, for after the death of her second husband she was married to Mr. Wynn. Another instance is that of Lady Anne, widow of Prince Edward, son of Henry VI., who was foully murdered by the Duke of Gloucester and his colleagues at Tewkesbury. While conveying the body of her husband from London to Chertsey for interment, she was met by Richard Duke of Gloucester, and after a lengthy war of words, the murderer of the brave and courageous Prince proposed, and was accepted.

933. How many death-warrants has Queen Victoria signed during her reign?

Only one, which was for an execution in the Isle of Man. In Great Britain and Ireland no warrant is signed at all; the judge who tries and sentences the prisoners marks and signs the calendar, which, with the sentence spoken in open court by the judge, is the only authority the sheriff has for carrying out the death sentence, but on that authority, such as it is, the sheriff is bound to see that the sentence is duly carried out. In the case of a peer condemned to death in the court of the Lord High Steward, that official would sign a warrant for the execution, though if the sentence were passed in the court of peers in Parliament, the execution would be authorized by writ from the Sovereign. No such cases have occurred during the present reign, but should any case occur in the court of peers, the writ would probably issue, like other writs, out of Her Majesty's High Court of Judicature, without any signature or interference on the part of the Queen.

934. Is every month of the year a harvest month in one part of the world or another?

Yes, the harvesting of crops is continually going on in some part of the world from January to December. The following list, though not exhaustive, shows the harvest months in the under-mentioned districts throughout the world. January: Australia, New Zealand, and Chili. February and March:

Eastern part of India and Upper Egypt. April: Asia Minor, Cuba, Cyprus, Lower Egypt, India, Mexico, Persia, and Syria. May: Algeria, Central Asia, China, Japan, Morocco, and Texas. June: Southern France, Greece, Italy, Portugal, Spain, Turkey, and the Pacific and Southern States, U.S.A. July: Southern England, Austria, France, Roumania, Southern Russia, Upper Canada and New England, and the North-Western States, U.S.A. August: United Kingdom, Belgium, Denmark, Northern Germany, Holland, Poland, Central Russia, Lower Canada, Colombia, and Northern States, U.S.A. September and October: Scotland, Norway, Sweden, and Northern Russia. November: Southern Africa and Peru. December: Bengal, Burmah, and New South Wales.

935. Who, during the present decade, is the champion recruiter of the British Army?

Sergeant G. Ellison, of the Medical Staff Corps, Rochester Row, Westminster, holds that position, having during the last two years recruited and passed into the service 1,283 recruits. The sergeant has been commended for his energy in this respect by his superiors in high quarters. The number of recruits raised in London and finally approved in 1893 was 5,355; Manchester came second with nearly 1,000, then Glasgow 922, Birmingham 850, and Dublin 717. The number of recruits enlisted by Captain Sinclair, recruiting officer for Edinburgh, was 411, as compared with 504 in the preceding year. The total number of recruits in 1893 was 35,195, or a falling-off of 6,464 as compared with 1892. Of the total number of 1893 recruits, 5,466 were enlisted as under standard, and of these only 2,397 were still under standard on the 1st of January, 1894.

936. Has anyone in this country ever been buried in a church pillar?

Clement Spelman, of Narburgh, in the County of Norfolk, Recorder of Nottingham, who died in 1679, was buried in an upright position, inclosed in one of the pillars of Narburgh Church, so that the inscription is directly against the face of the deceased. This is believed to be the only instance of burial in a church pillar, though there are a large number of cases of burial in an upright position. Some years ago, during repairs to York Minster, it was found needful to lay bare a part of the foundation, when it was discovered that in the foundation of a pillar (that is, really, under the pillar proper) an interment had taken place. The body was that of a bishop in his robes. At Brent Pelham, in Hertfordshire, there is a monument in the church wall, which is said to have formerly

borne an inscription commemorating O'Piers Shonks, the lord of the manor. It consists of his stone coffin, occupying a hole made in the wall to receive it, so that this stone coffin is seen equally from inside and outside the church. In the north wall of the Church of Tremeirchion, in the diocese of St. Asaph, in North Wales, a stone coffin containing the remains of a vicar of that parish, who died about 1340, is placed in a similar position, and there are several other similar tombs in various parts of the country.

937. What is the length of the longest courtship on record?

Fifty-two years, that being the length of time over which the courtship of Mr. Wagoner and Miss Webb continued, which in the early part of 1894 resulted in their being married at Bath, New York; the ages of bride and bridegroom being seventy-six and seventy-eight respectively. A courtship of over fifty years occurred in this country in the case of a lady, residing near Folkestone, who was married in 1894 to a widower, the bride's age being seventy-five and that of the bridegroom seventy-four. A remarkable wedding was celebrated at Bruges some years ago, on the fiftieth anniversary of the courtship which resulted in this happy ending. Both bride and bridegroom were over eighty years of age. An old newspaper, published in the United States, contains the following announcement: "Married, at Bridgewater, December 16th, 1788, Captain Thomas Baxter, of Quincy, aged sixty-six, to Miss Whitman, of the former place, aged fifty-seven, after a long and tedious courtship of forty-eight years, which they both sustained with uncommon fortitude."

938. What is the highest price ever paid for a bottle of champagne?

Champagne has never exceeded £10 per bottle, and rarely more than £2. Wines occasionally fetch extraordinary prices. At a recent auction in London some Madeira, supposed to have been presented by Napoleon III., was sold at £3 3s. a bottle. Imperial Tokay has been sold at £3 a bottle. A few years ago two bottles of old Burgundy were sold at £80 each. There are a dozen cases of holy wine at the Hôtel de Ville, or town-hall, Bremen, which have been valued, considering the original price and cellarage and interest for 250 years, at £400,000 a bottle, £54,476 a glass, and £60 a drop. The Rothschilds are in possession of some 1778 Madeira wine, which went down in a ship which was wrecked at the mouth of the Scheldt. It was not recovered until 1814. Forty-four bottles were sold to Rothschild at £114 per bottle.

939. Where was there, in this country, a railing made from sword-blades?

Such a railing was recently discovered by Lord Archibald Campbell, President of the Highland Society, in a back yard at Richmond. This curious railing was originally set up by Lord Tweeddale at Twickenham House, and is undoubtedly made of swords, all broken short off by some 6in., and placed 4½in. apart perpendicularly between two very stout rails of iron. Many of them are Highland broadswords of the well-known type, and some of them grooved small-swords, stamped with the famous name of Andrea Ferrara. There is another railing made of swords in the Horse Armoury, Tower of London. It is composed of swords which were used in the Crimean War.

940. Where is the oldest lifeboat in the United Kingdom?

At South Shields, on the Tyne. There the first lifeboat was built by Henry Greathead, who shared with William Wouldhave the honour of being the first designer of the life-saving boats now stationed at all points of danger round our coasts. The first lifeboat was wrecked in 1830, while rescuing the crew of the brig *Glatton*; and the second lifeboat, named the *Tyne*, was built and launched at South Shields in 1833. Between 1833 and 1886 it was the means of saving 1,028 lives. This boat, now the oldest lifeboat in the United Kingdom, is still maintained in a state fit for service if required.

941. What is the smallest size of type a book has ever been set in?

Semi-nonpareil, in which size of type 288 lines are required to make a foot. There are no fewer than 190 different widths or thicknesses of types used in printing, which are of all sizes, from the immense poster types one is accustomed to see on hoardings, down to an infinitely small size that can only be read by the aid of a magnifying glass. The body of *Tit-Bits* is printed in bourgeois type, of which 102 lines go to the foot. There are, at least, eleven sizes of type smaller than the bourgeois, as shown in the following list, namely :—

Types.	Lines to the ft.	Types.	Lines to the ft
Bourgeois	102	Ruby	166
Brevier	111	Pearl	179
Minion	122	Diamond	204
Emerald	128	Gem	222
Nonpareil	144	Brilliant	238
Ruby Nonpareil	162	Semi-Nonpareil	288

A little book called the "Mite" was recently published. It is set in brilliant, and the pages are ten centimètres by seven centimètres. The Oxford University Press publish an edition of the Bible in this small type. Another typographical curiosity is a copy of a French translation of Dante's "Divine Comedy," which was exhibited at the Paris Exhibition of 1882. The tiny volume is less than half an inch square, and consists of 500 pages, to make which only two sheets of printer's paper were required. It contains in all 14,323 verses, and is set in semi-nonpareil.

942. How many bankrupt nations are there in Europe?

Turkey was declared bankrupt in 1876. The creditors came to an arrangement, and certain revenues were assigned to them in payment of interest on a reduced scale. An enormous sum, about £30,000,000, is still owing to Russia for the war indemnity. The finances of Portugal are in an unsatisfactory condition, too, the expenditure for 1893-4 being about £1,000,000 more than the revenue. The National Debt amounts to £31 per head of population. The King in 1892 sacrificed a fifth of his civil list for the relief of the Treasury. Roumania is in about the same condition. The public debt for a poor country like this is enormous, being about £5 a head of the population. Spain is deeply in debt and very poor, but is doing her best to keep her head above water. Italy is spending so much on her navy and army that, if she does not take care, she will have to go into the bankruptcy court, like Turkey. Great Britain and Prussia are said to be the only two European nations which raise sufficient revenue to guarantee a permanent equilibrium of the annual Budget. This country has made during the past quarter of a century, and still continues to make, provision for considerable reductions of her outstanding National Debt, which in 1817 stood at over 848 millions, and is now under 672 millions. France has the largest National Debt, namely, over 1,200 millions, or very nearly £32 per head of population.

943. What is the weight of the twelve largest pears gathered off one tree in any season?

In the garden at Headington Hill, near Oxford, of Mr. Thomas Arnall, head postmaster of that city, in the year 1893, twelve pears were gathered from one tree, whose aggregate weight amounted to 27lb. 6oz. The weight of the largest was 3lb. 8oz.; that of the next three in weight, 2lb. ½oz. each; and the weight of the smallest of them was 1¼lb. These remarkable pears were grown on an espalier tree against a brick wall. They were of the variety called Uvedales St. Germain.

944. What is the largest number of brass bands that have performed at any one entertainment?

One hundred and fifteen, that number of brass bands having performed at a fête or contest at the Crystal Palace on the 10th of July, 1860. The next largest number of brass bands performing at one entertainment was thirty-three, at a brass-band contest a few years ago, at the Belle Vue Gardens, Manchester, the first prize being valued at £111. A large number of brass-band contests take place every year in the northern counties and in Scotland. Over 100 brass-band contests took place in the summer of 1893 in Lancashire and Yorkshire, and 250 different bands took part in them. In 1883 there was only one brass band in the Salvation Army, composed of a father and his sons; by 1890 it had 8,550 brass bands, of which many have on some occasions combined; in 1893 it had 12,229 bands.

945. In which part of the world has the week only six days?

There is a small island in the South Pacific where there only appear to be six days in the week. This extraordinary phenomenon is brought about by the location of the island. Travellers around the world are acquainted with the fact that time is lost while travelling east, and gained while travelling west, the difference of time in a transatlantic journey alone being about four hours. Chatham Island is just on the line of demarcation between times and dates. The island is so near the Antarctic region that days and nights are altogether mixed up, from the idea of an ordinary individual; and this plan of jumping the afternoon of one day and the morning of the next has been adopted, so as to keep in line with the almanac. Weeks in different parts of the world vary in length. Amongst the natives of the cataract region of the Congo, four days form a week, while amongst the Chinese and Tibetans the week has five days, named after the five elements—iron, wood, water, feathers, and earth. The Romans of ancient times had a nine-days week, while the Greeks used the decennial system, and thus had a ten-days week. The French Revolution altered the seven-days week into a decade of ten days, but the system introduced in 1793 was abrogated in 1805.

946. Which public-house in this country claims to have the most elaborate decorations?

The Talbot public-house at Nottingham is more elaborately decorated than any other public-house in this country, all the walls being covered with paintings done in a most artistic

manner, and the ceilings ornamented with elaborate decorations. The Talbot is the largest as well as the most magnificently got-up public-house in the United Kingdom. The Feathers, a well-known ancient hostelry in Ludlow, is one of the most striking and handsome of the timber-ribbed, pargeted buildings in England, rich in various devices, including the Prince of Wales's feathers, adopted as the sign of the house in the time of King Arthur. Many of the rooms have beautiful panellings of carved oak and quaintly moulded ceilings. The Crown and Treaty, locally styled the "Crown and Treat ye," in Uxbridge, has several elaborately decorated rooms. It was originally a mansion, the seat of the Bennets, who afterwards became Earls of Arlington and Tankerville, and in 1644, when known as Mr. Carr's house, was the scene of the conference between representatives of King Charles and his Parliament, which resulted in a treaty, and earned for the house the name of the Treaty House. The great room in which the conference took place still remains in its original state, as does also the presence chamber, another fine apartment wainscoted with dark oak.

947. What animal has the greatest number of ribs?

Snakes have a greater number of ribs than any other animal, the number of ribs varying according to species. The boa or python has the greatest number, having no fewer than 320 pairs of ribs. The rattlesnake has 171 pairs. The python or boa sometimes attains to an enormous size, and has been reported by credible authorities as reaching the length of 30ft. The shark has ninety-five pairs of ribs, and the conger-eel sixty. The cholopus, or two-toed sloth, has forty-six ribs, twenty-three on each side, as against the twenty-four ribs of man. The bradypus, or three-toed sloth, has thirty-two.

948. Which actor is credited with being the most expert swordsman?

Mr. Henry Irving. He has fought more stage duels than any other actor, past or present. He and Mr. Alexander used to display great artistic skill in the encounter in "Macbeth," although the fight was concluded off the stage. The second act of "The Dead Heart" also contains a fine duel scene. When produced a few years ago at the Lyceum, after "Macbeth," the duel was a downright match between the famous tragedian and Mr. Bancroft, who rose to the occasion, and rendered his death-scene in a praiseworthy manner. For several weeks before the production of this play the combatants diligently rehearsed at M. Bertrand's, in Warwick Street, where

thirty years ago M. Fechter and Mr. Hermann Vezin rehearsed, under the same tuition, the duel scene in "Hamlet." The fencing at the Lyceum has become famous for its vigour and finesse, and the duels that have been enacted are noted for being archæologically correct. Among such duels are those in "Faust," "Macbeth," and "Ravenswood."

949. Where was a concert given by five thousand abstainers?

At the National Temperance Jubilee Fête, held at the Crystal Palace, on September 6th, 1882, there were two concerts, one given at two o'clock by 5,000 juvenile abstainers, and one at four o'clock by 4,000 adults, both being conducted by Mr. J. A. Birch, Mr. C. S. Jekyll presiding at the organ. Some 50,000 total abstainers and their friends celebrated this jubilee year of the temperance movement. In the fifth annual festival of the National Temperance Choral Union, held at the Crystal Palace on the 10th of July, 1894, a concert was given by 5,000 abstainers.

950. Which kind of building stone best resists the action of fire?

A new kind of building stone or material called fossil coral, which is being worked in the Bay of Suva, Fiji, resists the action of fire better than any other natural building stone. When first worked it is so soft that it can easily be cut into any desired form, but it soon hardens after exposure to the air, and has then all the characteristics of fire-brick. Another building stone which resists the action of fire is peperino, so named from the black scoria-like peppercorns with which it is studded. It includes Lapis Albanus and Lapis Gabinus, both stones of volcanic origin, being, in fact, a conglomerate of ashes, gravel, and fragments of lava. This fire-proof building stone is still quarried near Rome, and in past ages contributed largely to the material used in building the oldest and most durable parts of the city. Of the sandstones—known as fire stones—Reigate stone is the best resister of fire. Windsor Castle, Hampton Court, and many Metropolitan buildings are built of this stone. Another is Minera stone, quarried near Wrexham. It is largely used in Liverpool, and has been recently introduced into the London market, being used on account of its durable and fire-proof qualities in building the National Safe Deposit Company's offices in the Metropolis. Several builders speak very highly of the fire-resisting properties of York stone; that variety known as Howley Park stone having on various occasions resisted enormous heat.

951. Which bird yields the most expensive feathers?

One of the bird of paradise species, a rare and beautiful bird which frequents the haunts of the tiger, and the feathers of which, therefore, cannot be obtained without great danger to those who hunt out the bird called the "feriwah." The tuft in the Prince of Wales's crown is said to consist of feathers plucked from this bird when alive, and to be valued at £10,000. The "mirasol," one of the birds of the Province of Buenos Ayres, in the Argentine Republic, yields very expensive feathers, which bring in the market over £200 per lb. Ostrich feathers have always held a pre-eminent position among ornamental feathers, and in supplying the demand, the ostrich seemed at one time to be in danger of extermination. Prime white feathers fetched from £20 to £50 per lb., and in one year Cape Colony exported over £1,000,000 worth of ostrich feathers. In the early history of ostrich farms, as much as £1,000 was given for particularly well-known birds of superior plumage, and the profits to those who first domesticated the bird were enormous. The annual yield of each bird —which is deprived twice a year of its plumes—is estimated at £15; and to keep the monopoly of the new industry, the Cape Parliament imposed an export tax of £100 on each bird and £5 on each egg sent out of the country.

952. Has there ever been a female bull-fighter?

Johanna Maestrick, who was born at Berlin, and went, when quite a child, with her parents to Portugal, became a successful bull-fighter. When she was seventeen years of age, a teacher of the art of bull-fighting who saw her was struck with her size and beauty, and offered to train her as a torrera, and she made her first appearance in that capacity in an arena at Oporto. A huge crowd collected to witness her performance. She quickly laid two bulls in the sand, and rode off, followed by a band of music and thunders of applause. In 1889 she carried off the first prize at the beauty show held at Lisbon. Bull-fighting, though a dangerous occupation, is a well-paid and highly respected one, for the most popular bull-fighter in Spain gets £1,000 for each performance.

953. Which school of art in this country has the best examination results?

For the last two years the Birmingham School of Art has taken leading position with the best examination results, closely followed by those of Bradford and Brighton, the latter of which has 500 art students. The leading schools of art in Scotland are those of Fettes College, at Edinburgh, Gordon's College, Aberdeen, and Madras College, St. Andrews. This

year's report of the Department of Science and Art of the Committee of Council on Education states that in the art division for the year ending August 31st, 1893, there were 19,877 elementary schools, where 2,086,946 scholars were taught drawing and were examined under the regulations of the Department. Of these schools 829 were in Scotland, 87 in Ireland, 41 in the Isle of Man, and 18 in Jersey. The grants earned for drawing in 1893 amounted to £152,860, as compared with £133,008 in 1892.

954. When were paid surgeons first employed in the army?

The records of the medical service of the British Army reach back to a very ancient date. Gore says that the first mention of army surgeons occurs in 1223. The first notice of the employment of paid surgeons in the army was in 1296, when Philip Beauvais, surgeon to Edward I.'s army in Scotland, received for his services a sum equivalent to about £850 of our money. Henry V. had one surgeon and twelve assistants in his army, whose precedence ranked below barbers and above washerwomen, and whose pay was fourpence a day. In 1417, before starting again for France, Henry V. issued a Royal warrant to press as many surgeons for the service as Mortsede could find. Mortsede was a great favourite, and was enjoined to find a certain staff of assistants and a retinue of archers. He was styled the Knight Surgeon, was Sheriff of London, and also held a combatant commission. This double commission recurred later on in the earlier wars in India, when it was not uncommon for a surgeon to hold in addition a commission as a combatant officer. In 1557 surgeons were specially appointed for the ordnance service, and they continued from that time to be regularly attached to the staff of generals in the field. The earliest trace of a distinct administrative organization is said to date from 1756, when Lord Barrington, as Secretary of War, was directed to establish a hospital board for the medical service of the army, then intended to take the field.

955. Have Bank of England notes ever been at a discount?

Several times. In 1696, two years after its charter was granted, the Bank was involved in great difficulties, arising out of the debased currency and the necessity of a general re-coinage, strongly urged by Sir Isaac Newton. The Bank was obliged to suspend payment of its notes, which were at a discount of 20 per cent. The fear of invasion in 1797 was the beginning of the most trying period in the Bank's

history. In 1801-2-3, with an increased paper issue, the notes fell to a discount of from 8 to 10 per cent., and, recovering for a while in 1804, remained at a discount of 2½ per cent. till 1808, which increased to from 13 to 16 per cent. in 1809 and 1810. As the over-issue was not checked, and the expenses of war increasingly crippled the business of the nation, the notes continued to fall in value till 1814, when, at a discount of 25 per cent., they reached the point of greatest depreciation. Their value rapidly rose after the close of the revolutionary wars in 1815; so that, in 1818, the value of a £5 Bank of England note was £4 17s. From 1797 the payment of Bank of England notes in gold was suspended till 1821, when specie payments were resumed. At first, none of the Bank of England notes were under £20; but in 1759 it began to issue notes for £10; and £5 notes were first issued in 1793.

956. Which bridge over the Thames took the longest time to build?

The old stone London Bridge took thirty-three years to build, having been commenced by Peter of Colechurch in 1176, and not completed till 1209. It was 926ft. long, 40ft. wide, about 60ft above the water, and stood upon nineteen pointed arches, between which were massive piers. A handsome stone chapel, dedicated to Thomas à Becket, stood upon the centre pier, and appears to have been the only building erected on the bridge at its foundation; though, in course of time, a row of houses on each side was added. The present bridge, from the designs of Sir John Rennie, was commenced in 1824, and opened by William IV. and his queen on the 1st of August, 1831. It cost half a million sterling. The Tower Bridge took a little more than eight years in building. The foundation was laid by the Prince of Wales on June 21, 1886, and the bridge was opened by him on July 7th, 1894.

957. Who holds the championship of the world as a draughts-player?

Mr. James Ferrie, who was born at Greenock in December, 1857. The match for the draughts championship between Ferrie and Mr. James Wyllie—the celebrated "Herd Laddie," now in his seventy-seventh year—was commenced in the Ram's Horn Hall, Ingram Street, Glasgow, on 7th April, 1894, and was brought to a close after twenty-four days' play on the 8th of May. Ferrie on two occasions, and Wyllie on one, took advantage of the clause in the articles which allowed the players a couple of days' rest—a new feature in a draughts contest, but one which is quite common in chess matches. The number of games (94)

agreed upon to decide the match is altogether unprecedented. At the end of the match, the scores stood thus: Ferrie, 13; Wyllie, 6; drawn, 69; with six of the stipulated 94 games to play. Over 500 persons witnessed the match the second Saturday after it commenced. To accommodate the spectators, a couple of large wall-boards, about 4ft. square, were brought into requisition, and on these the moves were reproduced as made by the actual contestants.

958. Have any British peers been musical composers?

The British peer most distinguished as a musical composer was Garrett Wellesley, second Baron Mornington, in the peerage of Ireland, born July 19th, 1735, in the County of Meath, and advanced to the dignities of Viscount Wellesley, of Dangan Castle, and Earl of Mornington, on October 20th, 1760. In his ninth year he played the second part in Corelli's sonatas on the violin; which instrument he at fourteen discarded for the harpsichord. Dublin University conferred on him the degree of Doctor of Music, and subsequently elected him professor of that faculty. He died May 22nd, 1781. Some of his compositions, chiefly vocal, were for church, and are found among the choir-books of St. Patrick's Cathedral at Dublin. One of his sons, the eleventh Earl of Westmorland, was also musical, and composed several Italian operas. It was chiefly through his exertions that the Royal Academy of Music was established in 1823. The Earl of Mar is the composer of several pieces of Church music. Bishops and archbishops, who are spiritual peers, are also to be counted among composers of music, mostly of a sacred character. Bishop Turton's chants and hymn tunes are in common use, and the present Archbishop of York is the composer of several hymns and tunes in "Hymns Ancient and Modern." King Oscar of Sweden is an instrumentalist and vocalist of no mean order; he is also a composer. The Duke of Saxe-Coburg-Gotha, in addition to being a talented violinist, has also composed several pieces of music. The Queen of the Belgians is probably the finest harpist in Europe.

959. What is the highest price ever quoted for shares in any mining company?

£800 for £1 shares. This was in the Devon Great Consols Company, which was established in 1844 and registered as Limited in 1872. The company's capital was £51,200, in 10,240 shares of £5 each, but it has been worked with a capital of £10,240, as £1 per share only was called up until recently, when 10s. per share more was paid. It was originally started with 1,000 shares of £1 each, but got enormously

rich, when the price of these £1 shares went up to £800. A year or two afterwards the mine was paying £45,000 to £50,000 a year in dividends. The dividends are now nil, and have been since December, 1880. The shares of the famous Broken Hill Silver Mine, in New South Wales, are said to have been quoted as high as fifty times their nominal value. They reached £85 some years ago. The mine is worked night and day in three 8-hour shifts, and over 2,000 hands are employed. In May, 1894, at the end of the half-year, the yield is said to have been higher than any ever obtained in a week at any other mine in the world. The silver yield that week was 675,913oz., lead 1,822 tons, and there were 1,347 tons of matte, containing 595 tons of copper. The values of that week's products were: Silver, £84,375; lead, £16,398; and copper, £6,000; or a total monetary value of £106,773. At the start of the mine, not more than ten years ago, one-third of the property, now worth upwards of £14,000,000, was sold for £200.

960. Have soap-bubbles ever been frozen?

Professor Dewar, in the course of his lectures at the Royal Institution on the solid and liquid state of matter, showed his audience many effects of the intense cold of liquid air, and exhibited some very interesting experiments with soap-bubbles. Not only is the liquid air itself extremely chilly, but the gaseous air, always simmering away from it, is nearly as cold. Mr. Lennox devised a vacuum jacketed champagne glass for showing this fact. The professor, having formed some soap-bubbles, lowered them into the atmosphere of the champagne glass, when the fragile films were immediately frozen and lay like broken egg-shells on the surface of the fluid, but without losing in any way their beautiful iridescent tints.

961. Where in this country is the finest collection of ancient musical instruments?

In the Royal College of Music, Kensington Gore, London, in a room known as the Donaldson Museum, is the finest collection of ancient musical instruments in this and probably in any other country. Mr. Donaldson, who has presented it to that institution, has been collecting it all over Europe during the last thirty years. Among these instruments may be found many of great historical interest. There are two ivory and ebony mandolines presented to the Venetian Ambassador to Madrid, Francesco Pesarro, one of the last of the Doges; an inlaid guitar and crimson leather case, which bears the emblems and arms of the Dauphin of France, afterwards Louis XV.; an Italian spinet of the sixteenth century, signed Joannis Celestini

Veniti, MDXCIII.; some Irish bagpipes, once the property of the late celebrated Tom Mahone, of Finea, West Meath, to whom they were presented by the Queen on her first visit to Ireland. There is also the clavicytherium, or upright spinet, the oldest keyboard stringed instrument existing. One of the guitars is believed to have belonged to the ill-fated David Rizzio. One of the finest private collections in this country belongs to Mr. Taphouse, Oxford. It is confined to keyboard stringed instruments which existed prior to the introduction of the modern pianoforte.

962. Is there a quadruped that lays eggs?

Those curious quadrupeds, the lowest of the mammalia, the ornithorhynchus, or duck-billed platypus, and the echidna, or porcupine ant-eater, lay eggs. The home of these animals is in Australasia, and the aborigines have always asserted the truth of this fact, but no proof of its truth, which was doubted by some, was obtained till 1884, when Mr. W. H. Caldwell's discoveries put the matter beyond a doubt. The ornithorhynchus lays two eggs at a time (each about three-quarters of an inch long) in a rough nest within its burrow, which often extends to the length of 50ft. The echidna's eggs, after being laid, are carried in a pouch until they are hatched. The duck-bill, which has the body and fur of an otter, with a bill like that of a duck, makes its nest at the end of a long burrow and lines it with grass. The spiny ant-eaters are toothless, long-tongued, three or five clawed animals, and covered with spines like the hedgehog.

963. What peeress has expended most money in this country for benevolent purposes?

Baroness Burdett-Coutts. Her great inherited wealth has been lavished unstintingly on benevolent schemes. She has been munificent in her gifts to the Established Church, St. Stephen's, Westminster, being a typical instance of the liberality in this direction which she has shown in providing churches and schools in various poor districts, as far apart as London and Carlisle. The Home at Shepherd's Bush and the Sewing School in Spitalfields which she founded have provided shelter, work, and comfort for thousands of women. For a purely benevolent purpose she purchased Nova Scotia Gardens when it was perhaps the worst spot in the East-end for squalor and filth, and erected the dwellings, for poor families, which now form Columbia Square. She laid out the churchyard of Old St. Pancras as a garden for the surrounding poor, and since the death of the Earl of Shaftesbury, she has been the President and most liberal

supporter of the Children's Protection Society. At a time of great distress she aided the Scotch at Girvan to emigrate, and similarly helped the Irish at Skibbereen. Though she has distributed so much in this country, her generosity has found further exercise elsewhere, especially in the endowment of several Colonial bishoprics. The Baroness is said to have offered a quarter of a million sterling to the Government for the use of the destitute in Ireland.

964. Which British celebrity had the largest head?

Joseph Hume, the well-known member of Parliament and advocate of reform in various branches of the public service, who sat for Weymouth, Aberdeen, Middlesex, Kilkenny, and Montrose, the last-named seat being held from 1842 till his death in 1855. Mr. Hume's head required an 8½-sized hat, 7 being the average Briton's size. The following is a list of the sizes of hats worn by several eminent men: Dean Stanley, 6¾; Lord Beaconsfield, 7; H.R.H. the Prince of Wales, 7 full; Charles Dickens, 7⅛; John Bright, 7⅛; Lord Macaulay, 7⅜; Mr. Gladstone, 7⅜; Wm. Thackeray, 7⅝; Archbishop of York (Thomson), 8 full. The Scotch head is larger than the English—York has the largest English range, Cambridge next, then Oxford. The professors of the Scotch Universities average $7\frac{1}{16}$. The following figures show the hats required by ordinary adult Englishmen:—

		Percentage of hats smaller than 7.	Percentage of hats larger than 7.
London University hats ...	126	34 ...	40
Ordinary hats...	36	55	25
Livery hats	12	83	8

965. What is the average earning power of a railway carriage?

Dividing the receipts applicable to passenger traffic on the railways of Great Britain by the total number of vehicles comprising the coaching plant, the average yearly revenue earned per carriage comes out pretty near to £650. It may, consequently, be laid down that a carriage, during the twenty to twenty-five years it is supposed to "run," earns on an average a total sum of from £13,000 to £16,000. The total yearly receipts from the passenger traffic of the railways of the United Kingdom, according to the published return for 1893, were £35,662,816, and the total number of carriages used for the conveyance of passengers, 54,865. Of course, a very large number of these carriages are only used for holiday and other emergencies, while several thousands are rarely seen on active service.

966. Who is the greatest living violin maker?

In America, the most famous violin maker is George Gemünder, of Astoria, N.Y. His successes, demonstrated at London in 1851, Paris in 1867, Vienna in 1873, Amsterdam in 1883, and at many other world's fairs, are undisputed evidence of this great master's art, and several special works are in his possession, valued as highly as the work of the best masters. Probably the most famous violin maker on the Continent is Johann Reiter, of Mittenwald, a small Bavarian town, where the violin industry is very extensively carried on. This renowned maker has made, with his own hands, over 200 violins, and between twenty and thirty 'cellos, which have found their way to all parts of the world.

967. What is the youngest age at which anyone has been married in this country?

Two years. Jane, daughter of Sir William Brereton, was in the sixteenth century, when only two years of age, married to John Sommerford, her senior by one year only. Both bride and bridegroom were carried in arms into church, where the words of the marriage ceremony were spoken for them. Robert Parr, of Rochford, was married at the age of three. In the case of Gilbert Gerard, who at the age of five was married to Emma Talbot, the lady was six years of age. The cases of child marriage where the ages of bride and bridegroom ranged from eight to eleven years were fairly numerous in the olden times, more especially in the diocese of Chester, the marriages having usually been arranged by the parents or relatives as a matter of barter or mutual interest. When the parties came of age they frequently confirmed these "baby weddings."

968. Was a train ever stopped by a mouse?

Such was the case on one of the Italian railways some time ago. It appears that the electrical apparatus in use on these lines, upon the departure of a train from a station, rings six strokes upon a gong in the next station. The station-master at Capri, hearing three strokes when there should have been six, came to the conclusion that there was something wrong on the line, and ordered up the electrical signals of warning. The train, which was by this time under full headway, came to a dead stop. Inquiry established the fact that everything was right on the line, and the train was ordered forward after some delay. The station-master now thought of looking at his gong, and there he found, stuck fast between the cogs of the electrical apparatus, a mouse. The unhappy animal happened

to be in the interior of the clock when it "struck one," and was caught by the wheels. On one occasion, a train running between Loudun and Chatellerault suddenly ran into a dense mass of locusts which had got on the line. They completely clogged the machinery, and effectually brought the train to a standstill. A stoppage of two hours was caused ; a party of labourers taking that time to clear the line of the obstructing insects.

969. Was an M.D. degree ever conferred on a self-taught workman?

Such a degree was in 1888 conferred by the University of Heidelberg on a self-taught artisan, Karl Umbach, who had never attended any gymnasium or realschule, and who while employed at a dye-works had, though not attending any school of medicine, merited the degree of M.D. In 1887 he presented an able dissertation upon "The influence of antipyrin upon secretions," which was most favourably judged by Dr. Kühne, of Heidelberg, and Professor Rencki, of Berne, and printed at Stuttgart. Umbach then went through an examination by six professors of the medical faculty with such success that, according to the statutes, the degree of Doctor of Medicine and Surgery had to be conferred upon him as well and legitimately won. Dr. John Hunter, born 1728, was apprenticed to a cabinet-maker, but offered his services as anatomical assistant to his brother William in London, and became himself a most distinguished surgeon, a bold and skilful operator, and, above all, one of the most renowned comparative anatomists. Hunter's Museum was purchased by Government for £15,000.

970. Which public lecturer commands the biggest fees?

Mrs. Victoria Woodhull, the wife of Mr. T. Biddulph Martin, received from a New York impresario £50,000 for fifty lectures delivered at various towns in America, or at the rate of £1,000 a lecture. The subject was the rotten state of society and the necessity for reform. Dr. T. de Witt Talmage, of Brooklyn Tabernacle, receives from his congregation £3,000 a year, but for many years past has made twice as much by lecturing. When he visited Europe he is said to have been offered £12,000 for a series of lectures, but to have declined the offer. In 1890 Mr. H. M. Stanley, the African explorer, received 300 guineas for every lecture that he delivered, his fee having risen from fifteen guineas, which it was three or four years earlier. In 1891, on an American lecturing tour, it was estimated that he made about £20,000. The scale of his lecture fees then ranged from

£70 to £500 a night, the seats on stage or platform being sold at £1 to £2 each. The returns for 110 lectures in this country and in America amounted to something like £55,000. In six months Mr. George Kennar's lectures in America brought in £8,000. Lieutenant Peary, the Arctic explorer, made £4,000 in three months. Mr. Max O'Rell (Paul Blouet), another very popular and successful lecturer, has cleared large sums in the United States, and even in Africa, at Johannesburg, his receipts for one week were £1,058.

971. Which European Power has been most frequently at war during the last fifty years?

Great Britain, which, during the last fifty years, has been engaged in over forty wars. Indeed, scarcely a year of this period has passed in which our country has not had a war on hand in some part of the world. These wars may thus be summarized : Sikh War, 1845–6 ; Caffre War, 1846 ; War with China, 1847 ; Afghan War, 1849 ; Sikh War, 1848–9 ; Burmese War, 1850 ; Caffre War, 1851–2 ; Burmese Wars, 1852 and 1853 ; Crimea, 1854 ; Chinese War, 1856–8 ; Indian Mutiny, 1857 ; Maori War, 1860–1 ; Wars with China, 1860 and 1862 ; Maori War, 1863–6 ; Ashantee War, 1864 , Bhootanese, 1864 ; Abyssinian War, 1867–8 ; Bazotees, 1868 ; Maori War, 1868–9 ; Looshais, 1871 ; Ashantee, 1873–4 ; Caffre, 1877 ; Zulu, 1878–9 ; Afghan War, 1878–80 ; Basutoland, 1879–81 ; Transvaal, 1879–81 ; Egyptian War, 1882 ; Soudan, 1884–89 ; Burmah, 1885–1892 ; Zanzibar, 1890 ; India, 1890 ; and Matebele, 1894.

972. What is the greatest number of calls per hour ever done on the telephone?

One hundred and eighty-five. This feat was performed at the New York Central Telegraph Exchange by a young Irish operator who had less than twelve months' experience at the switchboard. At some of the busy London Exchanges there are clever operators who, on special occasions, have called between 400 and 500 subscribers in a forenoon. The St. Louis (U.S.) Telephone Company wished all its 3,755 subscribers a happy new year on the 1st of January, 1894, by dividing the system into ten sections worked by ten operators. Thirty seconds were allowed to each subscriber for a response. The fastest operator was a Mr. Donough, who called 514 subscribers in 3 hours 27 minutes, and got 260 responses, found five lines engaged, five out of service. and 255 not employed. The mean speed over all was 113 calls an hour for 3 hours 19 minutes, which is very smart work.

973. Are the gates of any town still kept locked between sunset and sunrise?

In Seoul, the capital of Corea, may be seen, near the Royal Palace, the famous bell which for over 400 years has given the signal for the closing of the city gates at dusk and their opening at dawn, and which has nightly rung the curfew, warning all citizens under pains and penalties to keep within their doors. Except the Joppa Gate, all the entrances to Jerusalem are closed each night at sunset: a custom as old, at least, as the days of Joshua. At the noon of Friday, the Mohammedan Sunday, the gates are shut for an hour, when the faithful hurry to pray before the Mosque of Omar. The shutting of the gates has had its origin in a belief among the Moslems that the Christians would, at some time, take the Holy City during the great hour of prayer, if this precaution were neglected. The only connection between the rock on which Gibraltar stands and the mainland of Spain is a narrow strip of sand, and the only entrance to the town on that side is by two gates, which, of course, are closed at night. The fortified towns of Strasburg and Metz close their gates from sunset to sunrise, and Vittoria, Badajos, and Salamanca, in Spain, preserve the same custom.

974. Has any athletic meeting for the blind ever been held?

A very successful athletic meeting was held at Upper Norwood in 1894 in connection with the twenty-first anniversary of the Royal Normal College for the Blind. In the figure skating contest, Miss Hannah Nellie Adams and Miss Nellie Wetherall took the prizes given by the National Skating Association in this competition. The sports also included swimming and diving, cycling in twelves, eights, and sixes, for both male and female competitors, an exhibition of exercises with dumb-bells and wands, and other athletic competitions. In 1893 a curious sight was witnessed near the Blind Asylum in Avenue Road, St. John's Wood, London. About fifty blind cyclists, led by one seeing man, mounted their machines just outside the Swiss Cottage, and rode for a spin to Hatfield and back, a distance of over thirty miles. In May, 1893, a party of blind cyclists, students from the Royal Normal College for the Blind, at Upper Norwood, started from London to Birmingham, calling at the Mansion House on their way. On June 11th, 1894, at Horwich, near Bolton, in Lancashire, a foot-race took place, in the presence of some 3,000 people, between a lame man named Barrett and a blind man named Higgins; the distance being about one mile 200 yards. The

lame man had five minutes start, and was 500 yards ahead when his opponent started. Higgins walked in splendid style, but failed to overtake Barnett, who won by about sixty yards. The husband of the National School mistress, New Radnor, some years ago, was totally blind, and yet well known as the fastest walker in the parish.

975. How many platelayers are accidentally killed every year in the United Kingdom?

Taking the average of the six years 1888–93 it is found that 111 platelayers were killed annually by accident on British railways, the actual figures for the respective years being 86, 91, 109, 136, 109, and 136. For the first six months of the year 1894 the number killed was 56, and 59 were injured, which is much about the average in recent years for both classes of catastrophes. A certain proportion of these fatalities are met with when walking, crossing, or standing on the line while on duty, and by being struck by projecting loads of waggons, etc., but for the most part they are the result of being surprised and cut down by passing trains. For the year which ended in December, 1893, the aggregate number of miles travelled by trains in the United Kingdom was 322,841,802, representing one platelayer killed for every 2,373,837 miles traversed. Ordinary railway-men have eight chances to one of escaping with their lives in case of accident; but for the platelayer the odds are five to four on death. During the year 1894 a platelayer was mangled on the average every thirty-five hours.

976. Are there in this country any sailing matches for yachts steered by ladies?

There is an annual sailing match for yachts on the Clyde, steered by lady members of the Clyde Corinthian Yacht Club. There are twenty lady members of the club, and in the two races in the sailing matches in July, 1894, twelve yachts entered and ten sailed, four in the first race and six in the second. E. S. Parker's *Finella* won the first race, but only by one minute, after deducting the time allowance of eleven minutes in respect of her greater size over the yachts of her opponents. In 1887 the Castle Yacht Club, of Calshot, was established, and ladies were admitted to membership. The club got up a few races in which the ladies steered, and the success of the enterprise far exceeded the expectation of its promoters. At first the only two ladies who figured as yacht-owners as well as skippers were Miss Mabel Cox, of the *Madcap*, and Miss Hammersley, of the *Dulcie*. The first match with ladies at the helm occurred on the 25th September, 1889, over a course

partly in Southampton Water and partly in the Solent. Miss Harvey steered *Queen Mab*, which was declared the winner. Amongst the many celebrities at the recent Cowes Regatta was Miss Maud Sutton, daughter of the late Sir Richard Sutton. She is owner of the *Morwena*, which has already won many victories on the Clyde. Miss Sutton steered her yacht to victory thirty times during 1893. The Royal Windermere Yacht Club, some years ago, had a competition in which each yacht throughout was steered by a lady.

977. Has fire-resisting glass ever been made?

In 1893 some fire-proof materials were subjected to certain tests at Berlin, under the auspices of the Berlin Royal Police Fire Brigade. The most remarkable experiments with satisfactory results were those with a patent fire-resisting glass, shown by Messrs. Siemen, of Dresden. It was found to be most suitable for any skylight or window necessary in a division between separate risks, as it will resist heat of 1,300deg. (C.) for half an hour or more. A glass which is nearly impervious to the calorific rays is made in Germany from 70 parts of sand, 25 of china clay, and 34 of soda. A plate a third of an inch thick allowed only 11 or 12 per cent. of the heat from a gas burner to pass.

978. In which country is hissing a public speaker considered "applause"?

In his book on the Basutos, the Rev. E. Casalis says that hisses are the most unequivocal marks of applause, and are as much courted in the African Parliaments and assemblies as they are dreaded by our candidates for popular favour. After a declamation in accordance with the general taste, the voice of the orator is drowned in a burst of shrill sounds, which force one to stop one's ears. Captain Cook also asserts that the people of Mallicollo show their admiration by hissing like a goose. In Italy the ancient Romans had three methods of expressing applause for speakers and at their places of entertainment, namely: (1) bombas, a hissing or buzzing noise; (2) imbrices, noises made with the hollow hands; and (3) testæ, striking of the hands together. Applause in theatres in Russia is strictly forbidden.

979. Which famous living author refuses to accept payment for any of his books from publishers?

This is true of Count Lyof Nikolaievitch Tolstoi, the famous Russian author, who, while in the army, as a member of the staff of Prince Gortschakoff, was present at the storming of Sebastopol in 1855. Leaving the army, and already famous

as a poet and novelist, he devoted himself to literature, and spent a short time in the most brilliant literary and social circles of St. Petersburg. Since his marriage he has lived in more or less retirement, and during the Russian famines of 1891 and 1892 made great efforts on behalf of the peasants on and in the vicinity of his estates. In the latter year Count Tolstoi resigned all social standing and privileges of his rank, and he now devotes most of his time and money to good works, while living as poorly as any of the peasantry. He insists that the literal interpretation of the Sermon on the Mount is the only rule of Christian life, and he has expressly declined to avail himself of any copyright in his works or in translations of them into other languages. Dr. John Charles Ryle, Bishop of Liverpool, has written above 200 tracts on religious subjects, many of which have been translated and reprinted in French, German, Dutch, Portuguese, Italian, Russian, Norwegian, Swedish, Danish, Hindustani, and Chinese; and it is said that he will take nothing from the publishers for them, and will make no profit from them.

980. Among which class of workmen in this country is insanity most prevalent?

Among that class which includes hucksters, costermongers, hawkers, and pedlars. Out of every 10,000 who follow these closely allied callings, 21·7 men and 36·9 women annually become insane — frequently the clear result of irregularity, drunkenness, and exposure. Artisans in the textile trade contribute 18·2 men and 24·4 women per 10,000. The wear and tear of a doctor's life places physicians, surgeons, and general practitioners next with 15·8 per 10,000, nearly on the same level as inn and hotel servants, cooks, and charwomen, 15·1. In the higher commercial branches the highest average for the years 1888 to 1892 is found among wool-staplers, cotton dealers, and silk merchants. The rate is comparatively low among those engaged in the heavier kinds of manual labour, as coalheavers and navvies. The depression in agriculture has probably something to do with the high rate (14·1 per 10,000) among farm servants, almost exactly the same proportion as prevails amongst chimney-sweeps (14·2).

981. Which country produces most wheat?

South Russia heads the list of wheat-producing countries. That part of the Russian Empire covers 86,674,760 acres, and produces 190,000,000 bushels of wheat in a year, besides 1,300,000,000 bushels of rye and oats, as well as other crops. Next come the wheat fields of the United States of America; first Iowa, which includes 35,228,800

acres, and produces 34,600,000 bushels of wheat annually ; next Illinois, which has an area of 35,459,200 acres, and produces 28,417,000 bushels of wheat in a year; thirdly, Minnesota, which extends over 53,459,840 acres, but of wheat produces only 28,056,000 bushels; and, fourthly, Wisconsin, which covers 34,511,600 acres, and produces 26,322,000 bushels of wheat in a year. The yield per acre in the United States averages 12 bushels, while in Great Britain it is about 27.

982. What is the greatest distance from which any object on the earth has been photographed?

At an exhibition of the Photographic Society a photograph of Mont Blanc, taken at a distance of fifty-six miles, was exhibited. Dallmeyer's telephotographic lens was used, smallest stop; extension of camera sixty inches, with seven minutes' exposure, at 6.15 p.m., August 27th, in windy weather. A perfect view of Mont Blanc, even at this great distance, was secured. It took the operator four months in the neighbourhood to find the most suitable place for the operation and the most favorable hour. The moon has been photographed, which is 239,000 miles from the earth, and the stars also, which are at vastly greater distances.

983. Which is the healthiest city in Europe?

This is, according to the latest statistics issued by the German Imperial Health Department, Berlin, whose death-rate is only 16·3 per 1,000. The unhealthiest in the world is Alexandria, which, despite its unvarying fine weather, its 300 fountains, and its soft sea breezes, has a death-rate of no less than 52·9 per 1,000. London occupies a favourable position with a rate of 20·3; but Stockholm and Christiania are better off, with rates of 16·9 and 19 respectively. Rome, on the other hand, prepared for the advent of the doctors by running up a death-rate of 27·6, and Venice emulated this example with a rate of 30·1. A bird's-eye view of the sanitary situation of Europe shows that it is the damp, chill, cloudy North which is healthy; and the dry, warm, sunny South which is unhealthy.

984. Who holds the best skating "record"?

With the improved modern skates some wonderful records have been made. "Fish" Smart, champion of 1881, skated a mile in 3min., and Norseng, the Norwegian champion, did five miles in 16min. 48⅖sec. This was again excelled by Mr. Donoghue, at Amsterdam, doing the same distance in 16min. 2⅗sec. The champion skater of the world at present is a Norwegian (Harold Hagen), two miles in 5min. ⅘sec.

985. Does any son rank higher in the peerage than his own father?

Such is the case of the son of Charles Frederick Abney-Hastings, who was raised to the peerage in 1880 as Baron Donington. In 1853, C. F. Abney-Hastings married Edith Maude, daughter of the second Marquis of Hastings, who, in her own right, became Countess of Loudoun. She died in 1874, and was succeeded in the title by her eldest son, Charles Edward Hastings Abney-Hastings, who then became Earl of Loudoun. Another case is that of a Scottish peer, the Marquis of Queensberry, who was for some time one of the representative peers of Scotland, but who, by his opinions, forfeited the confidence of his fellow-peers, and was and continues to be rejected by them. Meanwhile, his eldest son, Viscount Drumlanrig, has been made a peer (Baron Kelhead) of the United Kingdom; so that the son now sits and votes in the House from which his father is excluded, while the father is prohibited from even standing for the House from which the son is excluded.

986. Which train in this country runs the longest distance without stopping?

The greatest distance in this country which a train runs without stopping is 165½ miles, on the Great Southern and Western Railway, the train known as the American mail running from the Kingsbridge Terminus, Dublin, to Cork without a halt. The longest run in England without a stop is 158 miles, between London and Crewe. The longest time occupied by a train in making a journey, in proportion to the distance covered, is from Brill to Quainton, distance six and a half miles, time one hour and a half. From Shipston on Stour to Moreton in the Marsh is eight miles, time allowed fifty minutes.

987. In what country in the world has a funeral been attended by thousands of floating houses?

In Siam, on the occasion of the interment of one of its gods. White elephants are the object of worship in that country, and one of these living idols having died in November, 1892, at the age of 122, was accorded a magnificent funeral. A hundred Buddhist priests officiated at the ceremony. The three surviving white elephants, preceded by trumpets, and followed by an immense concourse of people, accompanied the funeral car to the bank of the Menam, where the King and his nobles received the mortal remains, which were transported to the opposite bank for burial. A procession of thirty vessels figured

at this curious funeral, while all the floating houses, ranged in double file on the Menam to the number of over 60,000, were adorned with flags of all colours and symbolic attributes. Before these white elephants the whole Siamese nation bows the knee; and each white elephant possesses its palace, a vessel of gold, and a harness resplendent with jewels. Several mandarins are attached to its service, and feed it with cakes and sugar-cane. The King of Siam is the only person before whom it bows the knee, and a similar salutation is rendered it by the monarch; while after death the deceased god receives the honours of a Royal funeral.

988. How many students attend the National Gallery every year?

The annual Parliamentary report states that the total number of students' attendances on Thursdays and Fridays, which are the students' days, when the Gallery, free at other times, is open to the public on a fee of sixpence each, were throughout the year 1893, 20,936. Independently of partial studies, 971 oil-colour copies of pictures were made during that period, namely, 402 from the works of eighty-seven old masters, and 569 from the works of forty-nine modern painters. On the public days during the year the Gallery was visited by 486,746 persons, showing a daily average attendance on each of these 207 days of 2,351 persons. On students' days, 38,976 persons were admitted between January 1st and December 31st, 1893; the admission fees thus, at 6d. each, amounting to £974 8s., as compared with £1,048 14s. received in 1892.

989. Is there any instance in the British peerage of the heir being a twin?

Lord Napier of Magdala, who is a twin with General George Napier, and the Earl of Durham, who is a twin with the Hon. Frederick Lambton, are the only two cases in the whole peerage of twin sons including the heir. In each case the younger twin is heir-presumptive to the title. The most remarkable twins for the strange coincidences connected with them were the brothers March, of Arcadia, Hamilton County, U.S. These men, who, in 1885, had attained the age of eighty-seven, married on the same day two sisters, also twins, who were three years their juniors. Each couple has reared twelve children—in each case seven sons and five daughters. They were married on the 27th of the month, and the whole of the twenty-four children were born on the 27th of the month. The two men are so much alike that few can tell one from the other, and the likeness between the wives is equally striking.

990. What is the size of the largest shell ever found?

Seven feet in length and over 15ft. in circumference, being the size of the shell of one of the largest thalassians (sea tortoises or turtles) of the genus Sphargis, and its weight was close upon 1,900lb. These giant turtles are found all along the Atlantic coast. A shell of the giant oyster imported from India measured 3½ft. by 4ft., and weighed nearly 500lb. The giant clam is even larger still, some being found measuring a yard and a half in length, and weighing 500lb. Magnificent examples of these shells may be seen in the Church of St. Sulpice, Paris, where they hold the holy water. They were the gift of the Venetian Republic to Francis I. When the Island of Mauritius, off the east coast of Africa, was ceded to Great Britain by France in 1810, there was a gigantic turtle in a court of the artillery barracks at Louis, which is still there, although almost blind. It weighs 330lb., and stands 2ft. high when walking. Its shell is 8ft. 6in. long, and it can carry two men on its back with ease. It is believed to be at least 200 years old. One of the most valuable shells in the world is the "Chauk Shell." Those having the peculiarity of an opening on the right, and not on the left, are much prized by the women of the East Indies, and are sold for sums varying from £50 to £100. The rarest shell known is "The Cone of the Holy Mary." Only two specimens are known to be in existence. One is in the British Museum, and is valued at £1,000.

991. Has any Englishman since the days of "Chinese Gordon" ever been able to make a speech in the Chinese language?

The late Sir Richard Burton was probably one of the greatest linguists of the day, being able to converse freely in thirty-five different languages and dialects. In Arabic and Chinese he was most proficient, and in his Consular experience had much practice, and could deliver a speech in Chinese with the greatest ease and freedom. The Rev. James Legge, M.A., LL.D., Corpus Professor of Chinese at Oxford, says that he believes "there are, at this day, hundreds of Englishmen in China who can speak the Chinese language fluently, and make speeches in it, when it is necessary for them. I could name," he writes, "fifty missionaries and gentlemen in the Consular service, who could all readily and correctly talk and make speeches in Chinese." Professor Legge himself is the author of an edition of the Chinese Classics with Chinese text, a translation in English, notes critical and exegetical, and copious prolegomena; also of "Lectures on the Religions of

China," and he was one of the workers on "The Sacred Books of the East," edited by Professor F. Max Müller. Sir Robert Hart, G.M.C., His Celestial Majesty's Inspector-General of Chinese Customs, is an accomplished Chinese scholar, and periodically examines his staff in their knowledge of the Chinese language.

992. Where is the largest organ-building establishment in the world?

At Guelph, in the province of Ontario, in Canada, where Messrs. W. Bell and Co. have a factory capable of turning out 600 organs and 150 pianos per month. The organ-building factory of Messrs. William Hill and Son, Camden Road, is said to be the largest in this country. Messrs. Henry Willis and Sons, of Rochester Place, Camden Town, are famous as the builders of the organ in the Royal Albert Hall, which is one of the largest in the world.

993. Where have the most disastrous earthquakes taken place?

Since the beginning of the eighteenth century some very disastrous earthquakes have taken place. In 1703 there was an earthquake at Yeddo which caused the loss of 190,000 lives. Ninety-five thousand persons met their death in an earthquake which happened at Pekin, in 1731; while 41,000 lives were lost in an earthquake at Quito, in 1797. Over a million lives have been lost by earthquakes in various parts of the world during the past hundred years.

994. Were duels ever fought by members of Parliament in this country?

In 1763 a duel took place between Wilkes and Martin, and, on December 14th, 1770, between Lord George Germain and Governor Johnstone, in Hyde Park. In 1778 a duel between Lord George Germain and Temple Luttrell was prevented by an apology on the part of the former. On 20th March, 1780, a duel took place between Lord Shelburne and Colonel Fullerton; and on May 27th, 1798, Pitt met a Mr. Tierney on Putney Heath. On 29th November, 1799, a meeting took place between Fox and Mr. Adam in Hyde Park. Mr. Adam's first ball took effect, but the wound was very slight. In 1807 a duel took place between Sir Francis Burdett and Mr. Paul, on 5th of May, at Combe Wood, near Wimbledon Common. On September 21st, 1809, Lord Castlereagh and Mr. Canning met on Putney Heath and exchanged shots. On the 21st of March, 1829, the Duke of Wellington (the Prime Minister of England) and the Earl of Winchilsea met in Battersea, in full Session,

to discharge loaded pistols at each other on a question concerning the Protestant religion; Lord Winchilsea, after receiving the Duke's shot, fired in the air. Since 1832 Mr. Roebuck, M.P., fought two duels; one on the 19th of November, 1835, with Mr. Black, editor of the 'Morning Chronicle,' two shots each; and the other with Lord Powerscourt on the 28th of February, 1839.

995. Which trade or profession furnishes the British Colonies with the greatest number of immigrants?

That of artisan or mechanic, followed by that of labourer, the two between them furnishing about two-thirds of the whole number. Mulhall says that the professions of emigrants have not been uniformly classed in the various European countries, but gives the following figures as an approximate estimate so far as regards emigration from the United Kingdom, Germany, Italy, and Sweden:—

	Emigrants from United Kingdom.	Germany.	Italy.	Sweden.
Educated	7	17	6	35
Artisans	55	47	43	
Farm labourers	18	24	39	32
Servants	20	12	12	33
	100	100	100	100

996. What do railway carriages cost to build?

An ordinary modern third-class carriage with six compartments, and fitted with gas and automatic brake, costs about £400, and a first-class of the same type about £800, varying according to the class of fittings employed. An ordinary Pullman car costs no less than £3,000, and those more sumptuously furnished, used by Royalty when travelling, far exceed the latter figure in cost. To repair and renew these carriages so as to keep them always in good running order takes, on an average, 2¾d. for every mile run, or an average of £35 10s. per carriage per annum.

997. Who invented the lifeboat?

The invention of the lifeboat is claimed for Lionel Lukin, to whom a monument, recording it, has been erected at Hythe, in Kent. A patent was granted to him for it in 1785, but there is no record of any boat having been built from his design. In consequence of the ship *Adventure*, with all its crew, being lost at the mouth of the Tyne, in September, 1789, in the presence of thousands of helpless spectators, a reward for a lifeboat was offered by a committee at South Shields, in the County of Durham, and was obtained by Henry Greathead, of that town, for which he also received

£1,200 from Parliament, a gold medal from the Society of Arts and from the Royal Humane Society, and a purse of 100 guineas from Lloyd's Shipping Insurance Company, whose members voted £2,000 to encourage the building of lifeboats on different parts of the coast. The National Lifeboat Institution was founded in 1824, and has now 304 lifeboats on the coasts of the United Kingdom.

998. When was the first temperance order founded?

On 18th January, 1517, a man named Sigismund de Diettrichstein formed the Order of St. Christopher, in Germany, and on December 25th, 1600, the Landgrave of Hesse formed the Order of Temperance. The members of the first order were pledged to abstain from toast drinking, and the others were pledged not to drink more than seven glasses of liquor at a time, and that not oftener than twice a day. The modern temperance movement had its origin on the other side of the Atlantic, by the forming of the "Sober Society" in New Jersey, 1805. The first society on the principle of entire abstinence from spirits was established at Moreau, in North America, in 1806. In 1826, the American Society for the Promotion of Temperance was started, and was followed by a number of societies of a similar kind in different parts of the world.

999. Where are the largest organs in the world?

The largest organ in the world is at the Town Hall of Sydney, N.S.W., which took three years to build, and cost £15,000. The next largest is in Seville Cathedral, followed by one built at the expense of Mrs. A. L. Stewart, as a memorial to her husband, in the Cathedral of the Incarnation at Garden City, U.S. It is divided into four distinct parts in widely separated localities of the cathedral—but under the control of one organist, and is worked by electricity.

1000. How are the European emigrants distributed?

Nearly two-thirds of the European emigrants go to the United States and about a third to the various British Colonies. More than 80 per cent. of the emigrants from Ireland leave for the United States, and of the emigrants in 1893 from that division of the United Kingdom, upwards of three-fourths were returned as labourers. The High Commissioner for Canada, in his report on emigration to that Colony, says that the only immigrants they encourage are agriculturists with some capital, farm labourers, and domestic servants. The Australasian Colonies have expended many millions in promoting immigration, and it is calculated that every immigrant has cost New Zealand £19, Victoria £17, and Queensland £18.